

JPRS Report

Proliferation Issues

PROLIFERATION ISSUES

JPRS-TND-94-003

CONTENTS

31 January 1994

[This report contains foreign media information on issues related to worldwide proliferation and transfer activities in nuclear, chemical, and biological weapons, including delivery systems and the transfer of weapons-relevant technologies.]

CHINA

	XINHUA Highlights Missile Testing Base in Northwest Official Reports No Change in Nuclear Industry's Importance	
EAST AS	IA	
REG	HONAL AFFAIRS	
	ROK To Investigate DPRK Purchase of Spectrum Analyzers Pyongyang Commentary Denounces 'Chemical War Preparations' in South Hata Formally Proposes To Resume Talks With DPRK Hata Vows To Monitor Alleged High-Tech Flow to DPRK ROK Dailies Examine Result of Butrus-Ghali's Visit to DPRK	3
NO	RTH KOREA	
	Kim Il-song's New Year's Address Rejects Nuclear 'Pressure' Intelligence Unit Reportedly Shifted to Defense Commission Allegations of Uranium Mining in North Hwanghae Province	5
SOU	TH KOREA	
	Nuclear Control Center To Be Established	5
TAI	WAN	
	Defense Minister Denies Developing Nuclear Device	6
LATIN A	MERICA	
ARG	ENTINA	
	Possible Privatization of Nuclear Plants Criticized	7
BRA	ZIL	
	Article Urges Senate To Approve Nuclear Agreement	7
CHI	LE	
	Government Fully Joins Nuclear Nonproliferation Pact	8
NEAR EA	ST/SOUTH ASIA	
REG	IONAL AFFAIRS	
	Threat of Nuclear War Between India and Pakistan Pakistani Editorial Comments India Dismisses Threat Asif Ali Refutes Reports Indian Party Protests Threat	9 9 9 9
EGY	PT	
	Minister on War Production, Chemical Weapons	10

INDIA

	Air Chief Says Country Developing Antimissile System Technical Snag Postpones Agni Missile Test Details on 30 November Prithvi Launching Given	12
IRA	aN .	
	Official Denies Tehran Seeking Nuclear Weapon Production Editorial Says Tehran Supports Ban on Nuclear Weapons	12
IRA	Q .	
	Regime Reportedly Hiding Chemical Weapons in Oil Pipes	13
ISR	AEL	
	Views on U.S. Nonproliferation Initiative Said To Differ	
PAI	KISTAN	
	Bhutto Bans Public Statements on Nuclear Power Plants Spokesman Denies Press Report on Nuclear Policy Energy Official Details Nuclear Achievements, Capabilities Editorial Sees U.S. 'Targeting' Islamic Countries Minister Reportedly Warns of 'Unsafe' Nuclear Project Editorial Backs Use of Nuclear Reactors To Meet Power Needs Article Reviews Nuclear Weapons Program	14 14 15 15
SUI	DAN	
	Iraqi, Iranian Radar, Missile Experts' Presence Noted	17
CENTRA	AL EURASIA	
REC	GIONAL AFFAIRS	
	Twenty-Seven Belarussian SS-25 Missiles To Be Dismantled in Russia Uranium Smuggling Attempt Thwarted Baykonur, Military Accords With Kazakhstan Detailed Brazauskas, Kravchuk Discuss Nuclear Security	18 18
RUS	SSIA	
	Agreements Needed on Missile Warning System Multipurpose Nuclear-Powered Submarine Under Construction Correspondent Views Plan to Dismantle Nuclear Submarines Novovoronezh Nuclear Power Engineering Plant Diversifies Russia Seeks Arms Exports to New Areas New Technology Developed To Destroy Chemical Weapons New Generation Guided-Missile Submarine Under Construction Minister Believes Arms Exports Can Double in 1994 Chelyabinsk-65 Radioactive Waste Is 'Very Complex Problem' Problems of Nuclear Missile Maintenance Aired Number of Emergencies in Nuclear Industry Drops	22 22 23 23 23 24 24 24 24
BEL	ARUS	
	Official Interviewed On Construction of Waste Burial Sites	25
EST	ONIA	
	Nuclear Fuel Removal From Paldiski No Later Than April	26
LIT	HUANIA	
	Government Resolution Approves Nuclear Fuel Waste Storage	26

MOLDOVA

Smugglers Caught With 1.7 KG of Uranium	. 27
UKRAINE	
Official Says Nuclear Weapons Storage Unstable Country Dismantles 17 Warheads, but Questions Remain Top Military Leaders Say Nuclear Facilities Safe Attempt To Smuggle Radioactive Material Thwarted Physicist Predicts Chernobyl Explosion To 'Destroy Mankind' Defense Ministry Declines To Comment on SS-24 Deactivation Greater Yalta Proclaimed 'Nuclear-Free Zone' Kravchuk Edict Issued on Safeguarding of Nuclear Material Regiments Servicing SS-12 Missiles To Be 'Deactivated' Association Professes National Expansion, Nuclear Status Attempt To Smuggle Out Radioactive Materials Thwarted Nuclear Weapons in 'Very Serious' State Nuclear Control Said 'Technically Possible'	. 27 . 28 . 28 . 29 . 29 . 30 . 30 . 31
WEST EUROPE	
BELGIUM	
Reporting on Arms Exports to Third World, Confirmation Paper Publishes Export Data Senator Says Reporting Correct Plutonium May Be Recycled to MOX	35 36
FRANCE	
Mitterrand Does Not Rule Out MS-5 Missile Deployment Leotard Calls For Resumption of Nuclear Testing Super-Phoenix Reactor May Be Reactivated	37
GERMANY	
Siemens Has Nuclear Fuel Processed in Russian Factory CDU/CSU Criticizes Strict Arms Export Controls	37 38
SWITZERLAND	
Airplane Manufacturer Applies Stricter Policy on Exports	38
INTERNATIONAL	
North Korea, IAEA Fail to Make Progress in Second Round IAEA Delivers Technological Check List to North Korea IAEA To Transfer Batch of Enriched Iraqi Uranium to Russia DPRK Will Not Allow IAEA to Extract Samples From Fuel Rods IAEA Increases Number of Experts for DPRK Inspections India, Japan Discuss Nonproliferation Treaty Germany's BKA Warns Against 'Nuclear Crime' From Ex-USSR Dealers Brazil Signs Trade-Technology Accord With Russia Rabin Calls Czech Nuclear Supplies to Iran 'Dangerous' Glavkosmos Works Out New Rocket Contract With India Dutch Group Opposes Sale of Sub Technology to Taiwan Belgian Arms Exports to Middle East, Third World Detailed Algeria Pledges Peaceful Use of PRC Built Nuclear Reactor	40 41 41 41 41 43 44 44 44
Analysts Say Russian Submarines Sold to DPRK Can Carry Missiles	45

XINHUA Highlights Missile Testing Base in Northwest

OW1101104294 Beijing XINHUA Domestic Service in Chinese 0723 GMT 10 Jan 94

[By correspondents Cao Zhi (2580 2535) and He Xiquan (6320 6007 3123)]

[Excerpts] Lanzhou, 10 Jan (XINHUA)—Thanks to the painstaking efforts of the residents, an air force guided missile testing base in northwest China, which has the fame of "the Cradle of Miracle Arrows," has been turned into a surface-to-air-missile city, with trees lining the streets, the air filled with the aroma of ripening fruits, and complete facilities for daily life.

The base is located in the Great Badain Jaran Desert. More than 60 grass-roots units are scattered along the 22 small settlements in the 4,870 square km desert. People call the base "the isolated islet" because of its extremely difficult living conditions. [passage omitted on efforts to improve the living conditions]

More than 500 college graduates have been assigned to the base in recent years. Some 85 percent of them have become professional technical backbone elements, over 90 percent have performed meritorious service, and nearly 100 of them have been rated as outstanding intellectuals or outstanding scientific and technological cadres. In scientific research and experiment, the base has set the highest records in the number of guided missiles launched on a single day, in a single month, and in a single year. It is also the first base in China to successfully complete a multitargeting, minimum-altitude missile launching. It accomplished more than 100 scientific research and experimental tasks with flying colors. Six of the scientific research projects filled in the gaps in China's scientific and technological field, and dozens of the research results received state or military science and technology progress awards.

Official Reports No Change in Nuclear Industry's Importance

OW2812104093 Beijing XINHUA in English 0957 GMT 28 Dec 93

[Text] Beijing, December 28 (XINHUA)—China will continue keeping an elite task force of nuclear scientists, the top executive of the China National Nuclear Corporation (CNNC) said here today.

CNNC General Manager Jiang Xinxiong was speaking at a national conference on the industry, now focused on peaceful use of atomic energy.

On the industry's development in the 1990s, Jiang said that the country will build up a "network of nuclear power plants and nuclear fuel factories" as part of an overall effort to restructure its energy supply.

"Nuclear industry and technology are a yardstick for measuring the overall strength of a country and, for China, a pillar for its international standing," he said.

"There is no change to the strategic importance of China's nuclear industry despite the numerous changes that have taken place in international situation," Jiang added.

Through reforms, he said, CNNC will become a "gigantic enterprise group with nuclear production and research as its main undertaking while combining nuclear and non-nuclear and civilian and military production."

A portion of CNNC's human and material resources will be devoted to defense production.

Meanwhile, he said, CNNC will concentrate on developing new types of nuclear power and heat-supply reactors and building an experimental fast neutron accelerator, while strengthening basic researches in isotopic separation and nuclear fusion.

CNNC also plans to build up a task force competent enough for designing 600,000 kw, 900,000 kw and 1.2 million kw nuclear power plants for both domestic and overseas supply, Jiang said.

"There will also be nuclear construction companies capable of building such nuclear power plants," he said.

The work will start on the basis of China's success in designing and building, of its own, the 300,000 kw Qinshan Nuclear Power Plant, where operations have been normal.

The Qinshan facility has been in normal operation and is expected to produce 1.73 billion kwh [kilowatt hours] of electricity by the end of this year, Jiang said.

The No. 1 Generating Unit of 900,000 kw at Daya Bay Nuclear Plant in Guangdong Province is to go into commercial production in early February, and the No. 2 unit, of the same capacity, in June.

REGIONAL AFFAIRS

ROK To Investigate DPRK Purchase of Spectrum Analyzers

SK1501063994 Seoul CHUNGANG ILBO in Korean 15 Jan 94 p 4

[Text] The government gave an emergency order on 14 January to the ROK Embassy in Japan to grasp the truth of the irregular export of spectrum analyzers, which are core parts for missile development, from Japan to North Korea.

The Foreign Ministry said that it should be clarified whether or not the spectrum analyzers claimed to have been exported by Japanese companies are items regulated by the Coordinating Committee for Multilateral Export Controls [Cocom], and that it could be possible that North Korea imported them as simple electronic products and used them as missile parts and ordered the embassy in Japan to investigate the truth.

Pyongyang Commentary Denounces 'Chemical War Preparations' in South

SK2912084193 Pyongyang Korean Central Broadcasting Network in Korean 1150 GMT 28 Dec 93

[Commentary by Chong Pong-kil: "The Criminal Act of Even Inflicting the Disaster of Chemical Weapons"]

[Text] According to the 19 December issue of the Nigerian paper SUNDAY CHAMPION, the United States and South Korean puppets are accelerating the chemical war preparations. The paper exposed that the United States used germ and chemical weapons in the Korean and Vietnam wars, and even brought in a large amount of chemical weapons to South Korea after the Korean war, and that the South Korean puppets are preparing for a chemical war by reserving a large amount of chemical weapons under the protection of the United States.

The paper pointed out that recently the South Korean puppets decided to produce chemical weapons in a meeting of so-called related authorities and to submit it to the National Assembly. The paper also exposed that the South Korean puppets presently possess some 12 chemical weapons plants and have a deposit of over 25,000 chemical weapons.

This means that the South Korean puppets have secretly accelerated the preparations for chemical war and is now trying to push for such preparations legally and openly. It is an intolerable criminal act to drive fellow country men into the disaster of chemical weapons in addition to nuclear weapons.

As everyone knows, the world's peace-loving people today strongly demand the complete abolition of chemical weapons, together with nuclear weapons, which are mass lethal weapons. Chemical weapons which kill and injure people with toxic chemicals have been branded as the cruelest massacre weapon and their use and development are banned by international agreement.

Nevertheless, the South Korean puppets have produced and stored chemical weapons for a long time. There are some 40 underground nuclear and chemical weapons storage facilities in the areas near Mt. Kyeryong in South Chungchong Province and Suwon in Kyonggi Province. Even numerous ion chemical weapons, which are known as the most vicious and cruelest of mass lethal weapons, are stored there.

Prattling about the possession of independent chemical warfare capabilities, the former South Korean dictators built more than 10 toxic gas plants in South Korea and produced numerous chemical weapons.

The rascals brought in from the United States numerous military aircraft capable of dropping chemical bombs, and 155mm and 203mm guns which are capable of using them. The puppet army units have been operating chemical, biological, and radiological warfare schools for a long time to train chemical warfare specialists.

The South Korean puppets also staged systematic chemical war exercises in collaboration with foreign forces. The fact that new chemical warfare equipment was deployed in the Team Spirit joint military exercise and that units specialized in chemical warfare training participated is one of the examples.

Reporting on the true aspects of chemical war exercise staged during the Team Spirit joint military exercise, a South Korean broadcast revealed that in a chemical war exercise, a stimulated North area was wiped out by attacks by aircraft and by dropping smoke bombs, chemical bombs, germ bombs, and even drumming bombs so that no creature could survive.

These facts prove that the South Korean puppets have accelerated chemical war preparations for a long time. What cannot be overlooked is that the South Korean puppets are bragging about someone's development of biological weapons while scheming a chemical war against fellow countrymen. This is a scheme designed to legalize the chemical war maneuvers, which the rascals pushed for in such a manner as to lay blame on us, and to openly accelerate such maneuvers.

By spreading groundless rumors about us, the Kim Yongsam puppet clique openly announced that it decided to possess chemical weapons. This clearly shows how intentionally it is maneuvering to possess chemical weapons legally, not in a concealed manner, and to openly accelerate chemical war preparations.

The puppet clique's past criminal acts were so enormous that it is impossible to conceal its chemical war maneuvers in such a manner as to reverse black and white. Kim Yong-sam, the puppet traitor who bragged that any foreign force could not be better than fellow countrymen in the beginning of his regime, is openly talking gibberish about possession of chemical weapons while stressing that one should foster strength.

The Kim Yong-sam puppet clique, which put out the signboard of civilian government, is attempting to inflict

disaster of chemical weapons in addition to nuclear calamities on fellow countrymen together with outside forces. Thus, its filthy shape as ugly national traitor, murderer, and warmonger, has been exposed once again.

The Kim Yong-sam puppet clique, which turned down fellow countrymen's peace proposal and is dreaming of nuclear and chemical war, cannot avoid stern punishment by the nation. The Kim Yong-sam clique should look straight at the rushing flow of all fellow countrymen toward peace and reunification and should act with discretion. It should stop reckless war maneuvers and step down from power without delay.

Hata Formally Proposes To Resume Talks With DPRK

SK0901092894 Seoul YONHAP in English 0918 GMT 9 Jan 94

[Text] Beijing, Jan. 9 (YONHAP)—Visiting Japanese Deputy Prime Minister and Foreign Minister Tsutomu Hata formally proposed to North Korea here on Sunday [9 January] that the two countries resume their normalization talks suspended since November 1992.

In a press conference at the end of his two-day visit to China, Hata said, "Japan hopes to resume the normalization talks at an early date."

The Japanese minister said that he discussed this offer during his meeting with Chinese Foreign Minister Qian Qichen, who he said welcomed it.

Western sources here said unofficial contacts had already begun between the Japanese and North Korean Embassies in Beijing on matters related to resuming the normalization talks.

They said Japan first expressed their willingness to resume the talks to the North Korean Embassy in Beijing toward the close of last year.

"The time of the resumption of the talks could possibly be either next month or March," one of the sources said.

Regarding the North Korean nuclear issues, Minister Hata said Japan and China agreed that the recent substantial progress in U.S.- North Korea contacts was a welcome development.

Hata added he believes North Korea would not resort to any careless acts inasmuch as their nuclear question is directly linked to peace and stability in the whole region of Northeast Asia let alone the Korean peninsula.

Hata Vows To Monitor Alleged High-Tech Flow to DPRK

OW2812075893 Tokyo KYODO in English 0748 GMT 28 Dec 93

[Text] Tokyo, Dec. 28 KYODO—Foreign Minister Tsutomu Hata pledged Tuesday (28 December) to monitor the reported outflow of Japanese high technology and an estimated 200 billion yen annually in remittances from Korean residents in Japan to North Korea.

"I am determined to watch these reported outflows," Hata told a luncheon meeting at the Japan National Press Club.

Hata said he is concerned about statements by a North Korean defector that the pro-Pyongyang General Association of Korean Residents in Japan (Chongryun) has systematically shipped high-technology products to North Korea.

Lim Song son, a first lieutenant in the North Korean People's Army, defected to South Korea in August.

He told a Japanese think tank in November that Chongryun has circumvented Coordinating Committee for Multilateral Export Control (COCOM) regulations by clandestinely shipping military-related communications equipment, computer microchips and other high-tech products to Pyongyang.

Hata said he has been informed by government officials that the cabinet information research office estimated the annual outflow of money from Japan to North Korea a 200 billion yen.

The estimate apparently includes Chongryun's banking remittances to the North Korean Government, cash gifts from Korean residents in Japan to their relatives in North Korea and the value of various manufacturing plant-related investment, according to Katsumi Sato, director of the Modern Korean Institute.

Hata said, however, that the government faces difficulties in obtaining accurate data about the remittances and in confirming the alleged COCOM violations by Chongryun.

He ruled out applying an immediate economic sanctions to halt the alleged shipments.

Japan will not take the initiative of imposing economic sanctions on North Korea before the UN Security Council adopts a resolution calling for sanctions, he said.

North Korea could "erupt violently" if Japan put pressure on Pyongyang, he said.

Hata stressed that Japan and Asian countries need the presence of U.S. troops on Japanese soil as there are still "some countries armed with nuclear weapons" in this area of the world.

"We would face trouble if a vacuum was created in Asia following the withdrawal of U.S. Troops," he said.

"My ideas are not very different from those of Liberal Democratic Party President Yohei Kono," who recently voiced concern about a possible negative security impact following the withdrawal of U.S. Forces from the Philippines.

ROK Dailies Examine Result of Butrus-Ghali's Visit to DPRK

SK2812054693

[Editorial Report] The following is a compilation of editorials published in Seoul vernacular daily newspapers on 28

December on the significance of UN Secretary General Butrus Butrus-Ghali's recent visit to Pyongyang on the nuclear issue.

The conservative Seoul CHOSON ILBO in Korean on page 3 carries a 1,000-word editorial entitled "Butrus-Ghali and Dissolution of the UN Command."

Noting the ineffective result of his visit to Pyongyang on the North Korean nuclear issue, the editorial reported: "We hope UN Secretary General Butrus-Ghali, who has been to the North and South, will pay special attention to future North-South relations, including the nuclear issue, and consider those involved in his approach to the settlement of the issue. Kim Il-song, a North Korean man of absolute power, is decisively important in resolving the nuclear issue. Many figures who have met Kim Il-song said, however, that he was not likely to be well aware of the seriousness of the nuclear issue. Therefore, it is important to inform Kim Il- song of the seriousness of the nuclear issue. This can be effective when he has a heart-to-heart talk with Kim Il-song." Referring to the importance of the UN secretary general's role in the settlement of the nuclear issue and the need for his frequent visits to North Korea to achieve this, the editorial reported: "We paid attention to his remarks that the UN Command will be dissolved if peace is achieved on the Korean peninsula. We expect peace to be achieved on the Korean peninsula so there will not be a need for the UN Command. The UN Forces exist as a last resort to prevent events that run counter to peace from taking place."

The moderate Seoul TONG-A ILBO in Korean carries on page 3 a 800-word editorial entitled "The Result of UN Secretary General Butrus-Ghali's Visit to North Korea." Referring to North Korea's refusal of UN mediation in the settlement of the nuclear issue, the editorial stressed that "President Kim Il-song clearly said there is no need for the United Nations to mediate the nuclear issue because North Korean-U.S. negotiations are now under way." Noting North Korea's intention to directly hold negotiations with the United States regarding the nuclear issue, the editorial reported: "It is the ROK that is directly threatened by North Korean nuclear development. Nevertheless, North Korea wants to only hold direct talks with the United States with the intention of establishing diplomatic relations." Noting UN Secretary General Butrus-Ghali's proposal for the replacement of the armistice agreement with a peace treaty in peacetime on the Korean peninsula, the editorial reported: "For a long time, North Korea has been calling on the United States to replace the armistice agreement with a peace treaty, but the North and South have differences as parties to the conclusion of the peace treaty. The North and South must be parties to the conclucion of the peace treaty." The editorial urges North Korea to show a positive attitude toward the international climate for the settlement of the nuclear issue.

The left-leaning Seoul HANGYORE SINMUN in Korean on page 3 carries a 1,000-word editorial entitled "The North Korean Nuclear Issue—Can We Get Through This Crisis?" The editorial refers to UN Secretary General Butrus-Ghali's visit to North Korea as an occasion to "get

through" the nuclear issue crisis, reporting that "in his meeting with Secretary General Butrus-Ghali on 25 December, North Korean President Kim Il-song assessed that there are positive signs in the ongoing North Korean-U.S. negotiations." The editorial urges South Korea to persuade North Korea to clearly dissolve the suspicion regarding its nuclear development.

NORTH KOREA

Kim Il-song's New Year's Address Rejects Nuclear 'Pressure'

SK0101031694

[Excerpt] [Passage omitted]

Our party and the Republic Government put forward the 10-point program of great unity of the whole nation for reunification of the country in a bid to lay a foundation for national reunification through the united national strength last year and has made all efforts to realize the 10-point program.

Our 10-point program of great unity of the whole nation for reunification of the country reflects the 70 million fellow countrymen's noble desire to firmly unite all people as one by transcending the difference in ideology, ideas, and systems and to achieve the reunification and prosperity of our nation who has the long history of half a century.

We wanted the South Korean authorities to come out to the road of reconciliation and cooperation by responding to our 10-point program of great unity of the whole nation for reunification of the country. We also took the important measure for exchanging special envoys of the two sides' top leaders. However, the South Korean authorities have ignored our magnanimous proposals and all the people's desire for reunification. They have taken the road of depending upon foreign forces, not the road of national independence; they have taken the road to the North-South confrontation, not the road to national unity.

While frequently conducting large-scale military exercises against our Republic, in collusion with outside forces and talking about military countermeasures [kunsajok taeung] or an international cooperation system under the pretext of our nuclear issue, the South Korean authorities are leading North-South relations to a dangerous phase.

The so-called South Korean civilian regime is only so in appearance [houl ppunida], and is actually not different from the preceding military dictatorial regime. Anticommunist and fascist evil laws have remained as they are in South Korea. The South Korean people's desire for independence, democracy, and national reunification have not been realized. The South Korean people and figures of all strata are saying that they no longer have any further expectations of the current South Korean regime. This is natural.

If I speak of our nuclear issue, which the United States and its followers are babbling about, it is because of the antisocialist, anti-Republic maneuver which the United States has persistently sought.

It is the United States that raised the nonexistent nuclear issue and brought the nuclear weapons into the Korean peninsula in actuality, thus threatening us. Therefore, the nuclear issue on the Korean peninsula must be resolved through DPRK-U.S. talks. Pressure and threat cannot work on us. If the United States adheres to such methods, it cannot resolve the issue and may drive the situation to a deadlock. The United States should look straight at all facts and act with discretion.

Under the circumstances in which the DPRK-U.S. joint statement was adopted, if the two sides abide by and implement the principles which were already reached, the nuclear issue on the Korean peninsula can be impartially resolved.

There is no change in the principle and line of our party and the Republic Government for national reunification. We will make all efforts to achieve the national reunification by means of a confederation based on one nation, one state, two systems, and two governments according to the three-point principles of independence, peaceful reunification, and the great national unity. [passage omitted]

Intelligence Unit Reportedly Shifted to Defense Commission

SK1001062894 Seoul KBS-1 Radio Network in Korean 0500 GMT 10 Jan 94

[Excerpts] Amid the expectation that North Korea and the International Atomic Energy Agency will resume contacts early this week to adjust their positions regarding the nuclear inspection, the National Assembly's Foreign Affairs and Reunification Committee held a plenary meeting on 10 January to discuss the prospects of the North Korean nuclear issue and South-North dialogue after listening to a government report on the recent trends in North Korea.

The following is a report by reporter Han Yong-kyu from the National Assembly:

[Begin Han recording] [passage omitted covered by referent item] In today's report, the National Unification Board [NUB] reported that North Korea deployed over 40 camps and 300 ground-to-air guns near Yongbyon where nuclear facilities are located before and after it announced its withdrawal from the Nuclear Nonproliferation Treaty last year, and that it conducted 21 air drills last year. It was also revealed that North Korea reinforced and upgraded the branch commands of Yanggang, Chagang, and North Hwanghae Provinces to divisions and expanded its Scud missile regiment to brigade.

The NUB reported that as a part of North Korea's effort to strengthen the system for Kim Chong-il's succession, North Korea shifted the Public Security Ministry, an intelligence organization, to the National Defense Commission, controlled by Kim Chong-il, and strengthened its power. [passage omitted] [end recording]

Allegations of Uranium Mining in North Hwanghae Province

SK3012121093 Seoul YONHAF in English 1137 GMT 30 Dec 93

[Text] Pusan, Dec. 30 (YONHAP)—A North Korean man who escaped a North Korea-run logging yard in Siberia and arrived in South Korea recently, said here on Thursday there are about 10,000 North Korean loggers in Siberia who he said lead "animal-like" lives due to the lack of daily necessities.

Kim Kil-song, 31 of Sinuiju, North Pyong-an Province, told a press conference that lately North Korean loggers are forced to earn rubles by doing household chores at Russian homes or manual work at Russian industries.

"These extra works are at the instructions of Kim Chong-il after logging failed to fetch money due to the lack of transportation means. But workers have been obliged to contribute up to 90 percent of the money they earn in extra work to North Korea," Kim said.

The defector said he escaped Siberia after he learned his protest over the compulsory contribution was reported to security authorities.

He said that after the escape he managed to reach Vladivostok where he could stealthly board a Pusan-bound Russian freighter with the help of a Korean-Chinese there.

Kim said North Korea's head logging office is in Khabarovsk, which he said controls nine field logging yards in Siberia.

Until 1975, prison inmates and those who had just served out their terms were shipped to Siberia, he said, adding that thereafter, however, ordinary people were recruited because prisoners were often involved in troubles.

Kim said that during his military service in North Korea, he personally took part in digging a tunnel near Kaesong which he said was for use in holding nuclear. [sentence as received]

"I heard that they were mining uranium at an uranium mine near Pyongsan County, North Hwanghae Province," he said.

The defector said that also during his active service, Army officers used to boast during lectures, "the United States are afraid of us as we have nuclear arms. We even can reject nuclear inspections."

SOUTH KOREA

Nuclear Control Center To Be Established SK1201042194 Seoul THE KOREA TIMES in English 12 Jan 94 p 3

[Text] The government is planning to establish a nuclear control center in preparation for the initiation of simultaneous South-North nuclear inspections on related facilities. At the same time, it will push ahead with the export of construction, installation and operational technologies for nuclear furnaces to Southeast Asia and the development of new materials for aircraft.

These short- and long-term plans were contained in a Chongwadae [presidential offices] report submitted yesterday by Science and Technology Minister Kim Si-chung on his ministry's New Year policy programs.

According to Kim, South Korea has now emerged as the world's 10th largest user of nuclear power and it is high time that it engages in effective "nuclear diplomacy."

Along this line, he said, the "Nuclear Control Center" will be set up under the umbrella of the Korea Atomic Energy Research Institute (KAERI) to initiate preparatory measures for South-North nuclear inspections.

"In an effort to become more responsible in the application of nuclear technology, the center will concentrate on formulating new and improved policies," Kim explained.

In the area of research and development, the minister told President Kim Yong-sam that a total of 322.4 billion won will be invested into the development of new materials and precision chemical technologies.

"One of the main areas of emphasis in research is to localize technologies which are critical to the enhancement of the international competitiveness of the domestic agricultural industry," he elaborated.

The development of new integrated materials for aircraft will be tested and put into the commercial market by next year after necessary testing procedures are completed.

Along with the tangible research, the minister said 221 billion won will be invested until the year 2010 for the introduction of technologies which are on par with those in the world's seven most advanced countries.

Under the long-term plan, a total of 10 technologies related to bioengineering will be developed so as to help the nation gain a competitive edge in the international market, Kim observed.

He said his ministry will also focus on encouraging foreign research organizations to open up operations here so as to ignite joint research projects with local companies. On the other hand, 40 of the nation's most qualified research personnel will be dispatched abroad to pick up advanced technologies for domestic application.

At the university level, the ministry will seek to increase the investment in basic sciences from the 7.6 percent last year to 12 percent in 1998, introducing such new areas of research as space technology.

Addressing issues surfacing as a result of the conclusion of the Uruguay Round negotiations of the General Agreement on Tariffs and Trade (GATT), Kim said the financing of research projects will be overhauled with particular emphasis on intellectual property rights.

The minister said a greater portion of the budget will be funnelled into the development of environment-related technologies such as alternative coolants to chlorofluorocarbons (CFCs) to halt further environmental pollution and assist in efforts to reverse the damage.

TAIWAN

Defense Minister Denies Developing Nuclear Device

OW2712143793 Taipei CNA in English 1401 GMT 27 Dec 93

[Text] Taipei, Dec. 27 (CNA)—National Defense Minister Sun Chen on Monday [27 December] denied a foreign news report that the Republic of China [ROC] is among the six countries in the world now striving to develop nuclear weapons.

The National Broadcasting Corp. of the United States in a broadcast Sunday reported that Taiwan, South Korea, Iraq, Iran, Libya, and Algeria are sparing no efforts to become members of the world's nuclear arms club.

"The report is totally groundless," Sun [words indistinct] an inquiry at the Legislative Yuan, emphasizing that the ROC has no intention to produce nuclear devices.

He said the existing nuclear equipment on the island is for peaceful purposes, and that the island's three nuclear power plants are used solely to satisfy energy requirements here.

ARGENTINA

Possible Privatization of Nuclear Plants Criticized

PY1401115394 Buenos Aires NOTICIAS ARGENTINAS in Spanish 2237 GMT 13 Jan 94

[Text] Buenos Aires, 13 Jan (NA)—The Association of State Workers (ATE) announced today that the Economy Ministry's idea of privatizing the nuclear plants is a "disaster" and warned that the initiative will mark the "end of independent nuclear development."

In a communique, the state workers argue that the privatization of the nuclear plants "would cut the main source of income" of the National Atomic Energy Commission [CNEA] and would end the chain of research, development, and production.

"From the technical viewpoint, private capital does not offer any guarantees because the simple market law states that profit comes before any investment in nuclear safety," they sta'ed.

ATE workers state: "The CNEA will be reduced to a comptroller's office which will merely oversee nuclear safety."

The communique is signed by ATE Secretary General Victor de Gennaro. In it the organization ratifies its position "in defense of a complete CNEA within the framework of the Presidency of the Republic and at the service of national interests."

BRAZIL

Article Urges Senate To Approve Nuclear Agreement

PY0701224894 Sao Paulo O ESTADO DE \$ 10 PAULO in Portuguese 29 Dec 93 p A3

[From the Notes and Information Page: "A Senate Responsibility"]

[Text] The Senate Foreign Relations Committee must urgently explain to the nation why it is keeping the Quadripartite Agreement on the back burner. This agreement establishes a series of safeguards for Argentine and Brazilian nuclear activities. The least that can be expected is that there are grave enough reasons—which must be publicly explained—to justify an omission that will make Brazil subject to the affronts normally piled on irresponsible governments. The committee is not empowered to hold Brazilian foreign policy hostage without clearly explaining the reasons behind such a drastic measure. The highest national interest is at stake. The silent inspiration of the representatives of false nationalism, which also seek to become mentors of the nation's representatives, cannot prevail over those interests.

The Quadripartite Agreement achieved in a single stroke an inspired way of guaranteeing, in the eyes of the international community, the peaceful purposes of Brazilian and Argentine nuclear programs. It is a powerful instrument to build trust between the two signatory countries. It is also worth noting that Brazil has for some years suffered a variety of pressures to join the Non-Proliferation Treaty [NPT]. It does not do so because it believes the NPT is unacceptably discriminatory and differentiates between those who have and those who do not have nuclear weapons. In view of the progress in the nuclear program, the simultaneous increase in international efforts to achieve nonproliferation, and faced with the inescapable need to raise the level of relations with Argentina, Brazil chose to strengthen regional nuclear control instruments as a way to guarantee the international community of our peaceful use of the atom, and as a way to obtain the required approval to legitimize this sensitive area.

The country acted on two fronts: First, the Brazilian-Argentine Agency for Accounting and Control of Nuclear Materials (ABACC) was created and the Quadripartite Agreement was negotiated with Argentina, authorizing the ABACC and the International Atomic Energy Agency (IAEA) to supervise and control nuclear activities in the two countries. Second, efforts were made to eliminate the obstacles that prevented Brazil from accepting the Tlatelolco Treaty.

The purpose of this double action was, we repeat, to obtain the international community's respect and credibility without accepting the costs of the NPT. As a result, Brazil is possibly the only country that does not have a nuclear weapon and which did not sign the NPT. But in order to earn political profit from this—that is, credibility and respectability—it is necessary for Congress to approve the Quadripartite Agreement. If that does not happen we will only encourage the international community's general mistrust without a way to counteract it.

Contrary to what is feared by narrow-minded and perhaps well- intentioned people, the Quadripartite Agreement does not restrict our national sovereignty. Skillfully drafted, it does not present obstacles for building a nuclear submarine and it protects our autonomously obtained industrial and technological achievements. The supplementary arrangements introduced into the Agreement—which originally raised doubts because of the scope of regulations that could have gone beyond what was established in the main body of the agreement—were finally accepted in the record time of two negotiating sessions, as a demonstration that the IAEA has great political interest to see this Quadripartite Agreement entering into effect quickly.

The Brazilian Government thinks likewise. The Senate must approve the agreement before Brazil can join the Organization to Ban Nuclear Weapons in Latin America (Opanal), the agency responsible for the implementation of the Tlatelolco Treaty. The Opanal meeting scheduled for 7 December was postponed until 19 January at the request of the Brazilian Government. Opanal directors expect that Brazil, Argentina, and Chile—countries that reviewed their positions on the Tlatelolco Treaty—will formally join the organization by that date. For Brazil, joining Opanal now will mean influencing—as the country with the region's most complete nuclear program—the organization's working agenda that will be elaborated in January. From a broader point of view, approval of the agreement will be evidence of the respect Brazil has for joint efforts with the Argentine and Chilean Foreign Ministries on this

extremely sensitive issue. By not joining, however, we will be ridiculed for unnecessarily delaying the meeting. Brazil will also pay the political price of showing, before the international community, that the government is incapable of approving the Quadripartite Agreement on time.

Congress has been convened for a special session and could discuss international agreements and treaties as well as the specific item on the agenda. There are, therefore, ways for the Foreign Relations Committee and the Senate plenum to approve the text of the agreement before 19 January. To fail to do so will hurt the Brazilian image in the world.

CHILE

Government Fully Joins Nuclear Nonproliferation Pact

PY1801232494 Santiago Radio Cooperativa Network in Spanish 2200 GMT 18 Jan 94

[Text] The Chilean Government has become a full member of the Tlatelolco Treaty that proscribes nuclear

weapons in Latin America and the Caribbean. Ambassador Carlos Portales signed the document for the president of the Republic.

The Chilean Government also has joined the organization supervising the treaty—the Organization to Ban Nuclear Weapons in Latin America, OPANAL. The ceremony took place in Mexico City. Argentina joined the treaty during the same ceremony.

Portales said on the occasion that Chile emphasizes its complete renunciation and repudiation of the proliferation of weapors of mass destruction, adding that the country will contribute with initiatives seeking to prevent the proliferation of these types of weapons.

Chile ratified the Tlatelolco Treaty in October 1974, seven years after signing it. Its implementation, however, was suspended because Chile considered that all countries with nuclear programs in the region had to become an effective part of the agreement.

REGIONAL AFFAIRS

Threat of Nuclear War Between India and Pakistan

Pakistani Editorial Comments

BK1101145794 Rawalpindi JANG in Urdu 10 Jan 94 p 3

[Editorial: "Sardar Asif's Timely Warning"]

[Text] The South Asian region continues to be haunted by danger and difficulties, as there is no sign of a resolution to the main dispute between Pakistan and India—the Kashmir issue. A new round of bilateral talks was recently held after a lapse of more than a year. The talks failed, however, due to India's refusal to budge even an inch from its earlier position. Some U.S. Government spokesmen—especially Joseph P. Hoar, commander-in-chief of the Central Command—are giving the inspression that the talks did not fail and that there has been considerable progress, but a review of the statements of Pakistani and Indian spokesmen would hardly convince a person to share U.S. optimism. The general impression is that the 2-3 January talks remained abortive. This means the black cloud of tension is still hovering over the Indian subcontinent.

Pakistani Foreign Minister Sardar Asif Ahmad Ali rightly told his hosts in Tashkent that the Indian subcontinent and South Asia are facing great danger. He is also correct in saying that if the Kashmir dispute is not settled in accordance with the principles of justice and the UN resolutions, then war might erupt again between the two countries. If this happens, God forbid, the war might become nuclear. Sardar Asif Ahmad Ali's statement could never be called an exaggeration. Observers of history and relations between the two countries know they have already fough. three wars; Kashmir was the main dispute in all of them. Since the last war in 1971, the two countries have achieved nuclear capability. India openly carried out a nuclear explosion. Pakistan has not carried out such an explosion. but it acknowledges that it has the ability to make a nuclear weapon.

It is true that Pakistan has not manufactured a nuclear weapon, nor does it intend to do so. But if war erupts and it finds out that its opponent has a nuclear weapon, then Pakistan might take any step to defend itself. We know that on more than one occasion the two countries have come to the brink of war because of Indian military exercises; in these cases some foreign circles saw a real danger of nuclear war. Given the situation, Sardar Asif Ahmad Ali's expression of apprehension about a nuclear war cannot be called an exaggeration or an unfounded product of imagination.

There is a real risk of nuclear war that not only threatens peace in South Asia, but in the whole world. The only way to avoid such a danger is to strike at the root cause of tension between the two countries—the well-known Kashmir dispute. The world powers, especially the United States, should put all their weight behind resolving the

Kashmir issue if they want to save the Indian subcontinent from devastation and nuclear war. The danger signal given by Sardar Asif Ahmad Ali is not without its causes. He has informed the world in a timely manner of a possible danger; prudence dictates that serious efforts be made to deal with the situation before we miss the chance. It is not inappropriate to hope that the United Nations, the United States, the European countries, the Islamic Conference Organization, the PRC, and other Asian countries realize their responsibility in maintaining peace in this area and make wholehearted efforts to convince India to see reason. Pakistan has repeatedly conveyed its readiness to accept and implement any fair and reasonable proposal on Kashmir. Now it is up to India to realize its responsibilities and make sincere efforts to implement them. It will benefit the subcontinent and the two countries as well.

India Dismisses Threat

BK1101154894 Delhi All India Radio Network in English 1530 GMT 11 Jan 94

[Text] India today dismissed as motivated Pakistan's threat of a nuclear war in South Asia if the Kashmir issue is not resolved peacefully. Responding to queries from newsmen on Pakistan foreign minister's statement in Uzbekistan, an External Affairs Ministry spokesman said in New Delhi that Islamabad has only one-point agenda. Its repeated stand on Kashmir issue is also well-known. He said on the other hand, India's position on the issue is crystal clear. Responding to a question, he said India is always open for negotiations to resolve all the outstanding disputes with Pakistan.

Asif Ali Refutes Reports

BK1201034594 Islamabad Radio Pakistan Network in Urdu 0200 GMT 12 Jan 94

[Text] Foreign Minister Sardar Asif Ahmad Ali arrived in Kazakhstan's capital of Almaty yesterday on the last leg of his weeklong official visit to three Central Asian states. He was received at the airport by Kazakh Foreign Minister Suleymenov and other senior officials. During a brief discussion with the Kazakh foreign minister at the airport, Sardar Asif Ahmad Ali said ties between Kazakhstan and Pakistan will always be friendly and stable. He said Prime Minister Ms. Benazir Bhutto attaches great importance to ties with Central Asian states.

Foreign Minister Sardar Asif Ahmad Ali said the Kashmir problem is the most important issue between Pakistan and India and its resolution is essential to improving the security environment in South Asia. Refuting a REUTER report which stated the Pakistan foreign minister's warning that a nuclear war could break out in South Asia if the Kashmir issue is not resolved, Sardar Asif Ahmad Ali said a number of countries have expressed concern over the threat of war between Pakistan and India on the issue. He said in categorical terms that Pakistan wants a peaceful resolution of the Jammu and Kashmir dispute. With the same desire, Pakistan got ready to hold talks with India on every aspect of the dispute. He said to make the talks meaningful, it is essential that human rights violations be

halted in occupied Kashmir, and that India, with due seriousness, should display its political determination to solve this issue.

Indian Party Protests Threat

BK1401022094 Delhi Doordarshan Television Network in English 1615 GMT 13 Jan 94

[Text] The Youth Congress-I workers today courted arrest near the Pakistan High Commission in New Delhi protesting against the reported statement of the Pakistani foreign minister that a nuclear war may engulf South Asia if India-Pakistan territorial dispute remains unresolved. A memorandum submitted to a representative of the high commission said the best way to resolve the dispute over Kashmir is through direct discussions between the governments of India and Pakistan as envisaged under the Simla Agreement. The Youth Congress-I also urged Pakistan to refrain from making provocative statements in future if it wishes to maintain peace in South Asia. Islamabad should also stop interfering in India's internal affairs, the memorandum said.

EGYPT

Minister on War Production, Chemical Weapons NC1201133994 Cairo AL-JUMHURIYAH in Arabic 6 Jan 94 p 6

[Interview with Major General Engineer Muhammad al-Ghamrawi, minister of state for war production, by Jamal Kamal; place and date not given]

[Excerpts]

Kamal: Why is there interest in developing and enhancing the war industry when Egypt, the region, and the world are embarking on a new stage of peace in which certain restrictions are being imposed to control armaments and producing countries that monopolize on weapons production are calling for restrictions on the transfer of arms production technology?

Al-Ghamrawi: I have been asked these questions many times, even by people working in war production. I always answered with another question: Why should the Armed Forces be maintained and why should there be a constant call for developing and upgrading these forces?

If peace is the goal a state seeks to achieve and maintain to curb political and military tension and therefore provide more favorable conditions for best use of its resources to enhance the state's strength and enable it to continue its march toward progress, there must be a power to protect that peace. A general rule in the military, though, says that if you want peace you should be ready for war. Whoever advocates peace and tries to protect it through his own weakness would be signing his own death warrant. It is wrong to think that peace means doing away with or reducing the numbers of the armed forces because they are no longer needed for pursuing the state's national interests. The truth is that the lack of power makes the state a prey for ambitious persons and vulnerable to various risks at all

times. This creates domestic instability and directly affects development plans. [passage omitted]

Kamal: But there are international calls to control armaments and curb the expansion of war production. Steps have actually been taken to prevent the export of arms production technology.

Al-Ghamrawi: What is being said about controlling armaments or curbing expansion in military production is meant to make the various forms of war production exclusive to a group of states that monopolize it and control its prices.

The best evidence of this can be found in the fact that the major states' arms exports to the Third World in two years alone exceeded arms exports for 10 years. Besides, what does armament control have to do with developing your military industry, if your goal is to satisfy the needs of your Armeo Forces and develop the equipment they already have? Developing the military industry does not mean exporting it or trading in it in a way that undermines stability. [passage omitted]

Kamal: What is the major goal behind the development of the Egyptian military industry?

Al-Ghamrawi: The goal is to enhance the ties between the Ministry of War Production and the Ministry of Defense, which is the main user of military products. In other words, we want to provide for the needs of the Armed Forces and to link our plan for production to the Armed Forces' armament plan. [passage omitted]

Kamal: How can Egyptian military production be developed while there are restrictions on the transfer of arms production technology?

Al-Ghamrawi: This is an important issue that forms a large part of the new development strategy. This strategy is based on a new reading of the actual situation and on developing a new vision to cope with that situation.

Egypt's moderate policy and its belief in mutual interests and interrelation has helped it acquire many technologies without fear of abusing them. Egypt succeeded in acquiring the latest technologies from the United States, France, and some East European states. Our moderation provides us with the needed grounds to obtain what we want.

As for our vision, it is based on two main factors:

- 1. To utilize what we already have.
- 2. To develop and update what we already have and conduct further research. [passage omitted]

Kamal: What are the markets for Egyptian weapons under the current international competition?

Al-Ghamrawi: The Arab and African states. I think that with some political effort we can find the best marketing formula so that the revenue can be spent on developing the weapons.

Kamal: Do you think it is possible in the current situation in the Arab world to establish an Arab military industry?

Al-Ghamrawi: I still believe that Arab states have many capabilities to cooperate in military industry without fear. We are capable of entering the sphere of military production with products that meet international levels.

Kamal: Why do foreign papers attack the M-1 tank factory every now and then?

Al-Ghamrawi: The Egyptian factory for the production and repair of armored vehicles-which began with the production of the U.S. M-1 tank—was a considerable addition to the power of Egyptian military production. It is one of the most modern military factories built in the world recently. Military industries are always questioned and are subjected to attacks every now and then. It seems that Egypt's and its workers' success in building the factory and absorbing the tank manufacturing technology, the peak of military technologies, frightens some people. But we will go on with the project according to plan.

Kamal: But the project will be completed in 1997. Does this mean that the production license will be withdrawn and the factory closed?

Al-Ghamrawi: There is no such thing as withdrawing a production license. The hypothetical shelf life of the tank is 20 to 25 years. Tanks in general need overhauls, maintenance, and development. The M-1 tank we are manufacturing is only a developed version of the M-60-A-3. There is also the M-1-A-2. Moreover, can anyone take back from you the technology you have learned?

We started the overhauling of the M-60-A-3 in the factory and we will start the overhauling of the M-1. We are studying how to meet new demands. A joint study is under way with the Armed Forces to select an armored combat vehicle to be manufactured in the factory.

Kamal: Since the 122-mm and 130-mm guns were manufactured, the Egyptian artillery factory has not produced new pieces of artillery. Why?

Al-Ghamrawi: We obtained a license to manufacture the 120-mm barrel of the M-1 tank in the artillery factory. This is one of the latest technologies in the world and it is different from that of ordinary artillery. There is also a project to produce the strategic steel needed for the artillery industry in the factory.

Kamal: Some foreign newspapers once in a while report that Egypt is producing chemical weapons.

Al-Ghamrawi: We have an established and unchanging principle: We do not manufacture any type of chemical weapons. We only manufacture the equipment needed to protect ourselves against these weapons.

Kamal: Some people talk about the need to privatize military production.

Al-Ghamrawi: Privatizing the war industry is out of the question. Like the Armed Forces, war production is one of the elements of Egyptian power and national security. If it is not possible to buy security from any state, then war production cannot be sold. Privatization is unsuitable for war production. [passage omitted]

Plans To Produce Uranium Disclosed

NC1801143394 Cairo ROSE AL-YUSUF in Arabic 17 Jan 94 p 9

[Unattributed report]

[Text] Dr. Nabil al-Haziq, director of the Nuclear Substances Agency, has disclosed that Egypt is getting ready to start uranium production. The disclosure was made at the first conference on "the geology of uranium ore and the means of detection and exploration." The conference is being held this week in cooperation with the International Atomic Energy Agency [IAEA].

The conference aims to bring together geologists and experts in uranium exploration and to assess the recent finds of uranium. Recent discoveries have resulted in a haul of 850 tons of uranium ore, containing an estimated ratio of 0.1 percent of the substance.

It is known that Egyptian experts have discovered uranium ore in three locations: Qattar, situated northwest of al-Ghardaqah; al-Musaykat and al-'Ardiyah, situated south of the Safajah-Qina road; and Umm Ara, situated southeast of Aswan.

The conference, which lasts for a week, is attended by Egyptian and foreign geologists as well as IAEA representatives.

INDIA

Air Chief Says Country Developing Antimissile System

BK2312112493 Delhi INDIAN EXPRESS in English 17 Dec 93 p 6

[Text] Bangalore—India has embarked on a project for the development of anti-missile missiles system in the wake of reports that Pakistan was acquiring such missiles, Chief of the Air Staff Air Chief Marshall S.K. Kaul said on Thursday.

Kaul told reporters at the Avia India '93 international air show at the Yelahanka Indian Air Force (IAF) base that the Defence Research and Development Organisation (DRDO), the nodal agency for the integrated guided missiles programme (IGMP), had already begun working on such a missile.

An anti-missile system detects the long range missile fired by the enemy and ensures its destruction in mid-air by firing another missile.

Kaul said, the indigenous missile "Prithvi" would first be acquired by the Army followed by the IAF, on completion of test firing. However, the anti-missile programme would depend on the availability of finances in the light of the budgetary cut. "We will have to do some juggling with the available resources."

Referring to the United States' proposal to repeal the Pressler Amendment (which had embargoed supply of arms to Pakistan) the Air Chief Marshall noted "the threat to the nation will be viewed in its totality and not only in the light of the proposed repeal. We will conduct our own assessment and equip ourselves accordingly, whenever there is a need to augment our capability."

The IAF had drawn up a perspective plan covering the strategies to be adopted to counter threats to the nation over a 15 year period. Implementation of such a plan would, however, depend on the quantum of funds available with the Government, he added.

IAF would fully back the indigenous airborne early warning (AEW) project. "Such a system is very expensive and complicated, and not many countries have the technological expertise. The IAF will support any indigenous venture."

The indigenous AEW is being developed by the Centre for Airborne Systems (CABS) in Bangalore. The AEW has been successfully integrated on Avro HS 748 aircraft and test flown.

A. P. J. Abdul Kalaam, Scientific Advisor to the Defence Ministry, said the country was ready to sell Akash integrated ground to air missile systems abroad once the domestic commitments were met.

Technical Snag Postpones Agni Missile Test BK0701091894 Delhi All India Radio Network in English 0830 GMT 7 Jan 94

[Text] The scheduled third trial of the medium-range surface-to-surface missile, Agni, has been postponed. The test-firing of the country's most sophisticated missile was to be carried out today at the interim test range at Chandipur in Orissa. Our correspondent, quoting official sources in Balasore, reports that the trial was postponed at the last stage of the countdown this morning because of some technical snag. The exact date of the launching will be notified later.

Details on 30 November Prithvi Launching Given 94WP0042 Bombay THE TIMES OF INDIA in English 1 Dec 93 p 17

[Text] Balasore, Nov. 30—The medium range surfaceto-surface missile 'Prithvi' was launched from the interim test range (ITR) at Chandipur-on-sea, 15 km from here, today, reports PTI.

Official sources and that the indigenously developed missile with a range of 250 kms was test-fired from a mobile launched at 12.25 pm.

This is the 12th test-fire of 'Prithvi' which is programmed to hit an island "Tentuli Chadda" in the Bay of Bengal.

'Prithvi,' the most sophisticated tactical battlefield missile, was first test-fired from the rocket launching centre at Sriharikota in Andhra Pradesh in 1988.

Official sources said, a series of test termed as 'users test' would be conducted before the missile is handed over to the defence force.

Powered by a liquid propellant, Prithvi is one among the five missiles under the integrated guided missile development programme (IGMDP). The missile is now being produced at the public sector Bharat Dynamic Limited, Hyderabad and has the latest onboard computers as well as an advanced inertia navigation system.

The three services chiefs, along with DRDO chief Dr A.P.J. Abdul Kalam, were present during the launch, reports UNI.

Earlier, the Balasore district authorities had declared a ten-km radius around the island as a risk zone, and prohibited fishermen from approaching the island in their boats and trawlers. Four villages around the launching pad were evacuated.

IRAN

Official Denies Tehran Seeking Nuclear Weapon Production

LD1201150794 Tehran IRNA in English 1416 GMT 12 Jan 94

[Text] Tehran, Jan. 12, IRNA—A spokesman for Iran's Atomic Energy Organization dismissed as sheer lies an American daily report alleging that Iran is after production of nuclear weapons and said the hostile move was part of a preplanned U.S. plot against the Islamic World.

Speakign to IRNA Wednesday, 'Ali Shirzadian strongly denied the 'U.S. Today' [as recieved] report on Iran's nuclear activities and said Iran is one of the active members of the Internaional Atomic Energy Agency (IAEA) and is faithful to its commitments as a signatory to the treaty.

He noted that Iran's Atomic Energy Organization was committed to the principle of nuclear inspection adding that it had a clear policy and its activities had been for peaceful purposes.

The spokesman further said that due to the Islamic republic's commitment to the rules, the U.S. hostile propaganda against Iran's atomic activities had not least affected the IAEA decisions so far.

He said that the organization's report to the council of governors on Iran's clear atomic policies last fall was a firm response to U.S. allegations against the Islamic republic.

The IAEA secretary-genaral had said in his report that all the sites, buildings and laboratories inspected in Iran were devoid of any non-peaceful nuclear activities.

Editorial Says Tehran Supports Ban on Nuclear Weapons

NC3012152093 Tehran TEHRAN TIMES in English 28 Dec 93 p 2

[Editorial: "Ban Nuclear Weapons"]

[Text] United Nations Secretary General Butrus Butrus-Ghali has just visited Pyongyang, capital of North Korea.

Lately the United States has been pressuring international agencies to persuade North Korea to allow inspection of its

facilities and has even threatened to nuke North Korea if they ever built and used one. Butrus-Ghali was on a mission to intercede between the U.S. and North Korea. North Korea has not accepted the International Atomic Energy Agency's request to inspect its facilities and considers its nuclear activitis to be peaceful and regards U.S. attempts as bullying moves of intimidation.

What is unfortunate is that the secretary general of the United Nations is putting himself at the disposal of one of its members, namely the United States.

This is an important and opportune occasion (the birth of Jesus Christ); the secretary general should have considered other places. For instance, the situation in Bosnia-Herzegovina cries for intervention of an international body. Butrus-Ghali could have visited Serbia to put pressure on Serbs to end the genocide and massacre of innocent people.

The question of nuclear weapons should worry any conscientious individual. Weapons of such destructive powers are no toys for any military. Only the United States has used this weapon (in World War II). The Islamic Republic of Iran has maintained that its nuclear activities are peaceful and representatives of international agencies have repeatedly confirmed this.

Governments with nuclear capability claim to be stable and promise to take measures to control its military use. The former Soviet Union was such a stable government. When President Reagan was shot, the confusion in the White House as to "Who is in control!" testified to another stable government.

Conscientious individuals in the world have been rallying to ban nuclear weapons. Iran also believes that since nuclear weapons are dangerous and destructive, and that they could get out of control and create a world disaster, no country should have them.

IRAQ

Regime Reportedly Hiding Chemical Weapons in Oil Pipes

NC1001173994 (Clandestine) Voice of the People of Kurdistan in Arabic 1500 GMT 10 Jan 94

[Text] In its Monday issue, the newspaper AL-MU'TAMAR reported that news coming from the areas under the Iraqi regime's control indicate that the regime is hiding its chemical weapons in the oil pipes located between al-Fallujah City and the Jordanian border. This is the last desperate attempt by the Iraqi regime to hide its chemical and biological weapons from the eyes of the international inspectors.

ISRAEL

Views on U.S. Nonproliferation Initiative Said To Differ

TA2812095293 Tel Aviv HA'ARETZ in Hebrew 28 Dec 93 p A1

[Report by political correspondent Aluf Ben]

[Excerpts] Israel is studying the U.S. President's nuclear nonproliferation initiative. Government elements are currently discussing the details of the initiative in preparation for the formulation of Israel's official position, which will then require the approval of Yitzhaq Rabin, prime minister and defense minister. The review is taking into account political and technical considerations, such as the international policy on the prevention of nuclear proliferation, the U.S. position on Israel's nuclear capability, and the future of this issue in the era of peace arrangements.

Senior government elements said in the past that "Israel has no problem with any part of the initiative, and it can live with it," but divergent opinions have been voiced in internal debates, leading to sharp disagreements.

Various elements have voiced reservations about Israel's joining the Clinton initiative, asserting that Israel should not make commitments that will confine its future activities. [passage omitted on the Clinton initiative and foreign reports]

Senior government elements said that the main problem facing Israel's nuclear policy is the renewal of the Nuclear Nonproliferation Treaty (NPT), which Israel refused to sign. This treaty, which was first signed in 1968 and went into effect in 1970, acknowledges five nuclear states: the United States, Russia, Britain, France, and China. Many countries, as well as U.S. Administration figures, have urged Israel to sign the NPT. The belief in Israel, however, is that the United States will not exert pressure to secure Israel's signature to the treaty as long as the peace process continues and Israel is required to take territorial risks. According to this theory, Israel will be able to withstand pressure from the international community, but will find it difficult to stand up to direct U.S. pressure to join the NPT.

In 1969, the U.S. Administration endorsed the understanding achieved between President Richard Nixon and Prime Minister Golda Meir, and that understanding remains the foundation of Israel's nuclear policy.

Inspection of Nuclear Facilities Said Key to Peace NC2312120893 Cairo AL-AHRAM in Arabic 20 Dec 93 p 9

[Editorial: "The Middle East and Nuclear Arms"]

[Text] In a step that is no less important than the step taken to issue a resolution supporting the process of finding a political settlement in the Middle East, the UN General Assembly adopted a new resolution supporting the establishment of a nuclear weapons free zone in the Middle East. This should be preceded by a major step: Nuclear countries in the region should agree to submit their installations to supervision by the International Atomic Energy Agency [IAEA]. The importance of such a step is that it befits the spirit of peaceful settlement that is taking root in the region despite the obstacles and hindrances it is encountering. It also confirms that nuclear superiority naturally contradicts the desire to establish peace and stability.

It can be said that this resolution contains both implicit and explicit support for Egypt's policy on this matter, which is based on rejecting violence and superiority, as well as removing all weapons of mass destruction from the Middle East. President Mubarak has always had a positive call in this field.

Despite the fact that the resolution adopted by the UN General Assembly was not unanimous, it expressed the desire of the world's countries to get rid of all kinds of highly destructive weapons. Of course, Israel's stand is believed to be the cornerstone in the process of turning this resolution into a tangible reality. It is the only state in the region that has nuclear reactors and exceptional capability in the nuclear field. All international circles believe it is highly likely that Israel has nuclear weapons. Its stand is based on not allowing any kind of international supervision of its installations. This is a regrettable state of affairs that contradicts everything Israel sometimes claims regarding its commitment to a political settlement of its problems with its Arab neighbors. Israel's agreeing to allow the IAEA to inspect its installations is crucial to the establishment of peace and stability in the region. In addition, such a step would change the international resolution into a tangible reality.

PAKISTAN

Bhutto Bans Public Statements on Nuclear Power Plants

BK0201085694 Islamabad THE MUSLIM in English 2 Jan 94 p 2

[Text] Islamabad, Jan 1—Prime Minister Benazir Bhutto has strongly resented the statements of Federal Minister for Special Education Dr Sher Afghan and PAEC [Pakistan Atomic Energy Commission] Chairman Dr Ashfaq Ahmed about the Chashma Nuclear Power Plant.

The Prime Minister has, in a directive to these officals, asked them to refrain from issuing statements on such sensitive issues in public. She further said that if any [words indistinct] bring it to her notice directly. The Prime Minister has barred any minister from issuing statements about nuclear power plants in the future.

Spokesman Denies Press Report on Nuclear Policy

BK1301031694 Islamabad Radio Pakistan Network in Urdu 0200 GMT 13 Jan 94

[Text] Pakistan has again categorically stated that its nuclear program is for peaceful purposes only and it does not possess a nuclear weapon, nor does it intend to manufacture any. A Foreign Office spokesman said at a press briefing in Islamabad yesterday that Pakistan is firmly committed to the objective of nuclear nonproliferation and it will accept any just and nondiscriminatory mechanism for nuclear nonproliferation in South Asia. He was commenting on a report published in a local English daily which misquoted the prime minister's statement. The spokesman clarified that the statement as quoted by

the ASSOCIATED PRESS does not represent Pakistan's policy, nor was it part of the statement made by the prime minister.

Energy Official Details Nuclear Achievements, Capabilities

BK3112152393 Islamabad PAKISTAN in Urdu 30 Dec 93 p 3

[Editorial: "Pakistan Has Full Capability in Nuclear Technology"]

[Text] The declaration by Dr. Ashfaq Ahmed, chairman of the Pakistan Atomic Energy Commission, that Pakistan is among the few countries in the world that have achieved effective capability in all fields of nuclear technology is highly reassuring. Pakistan has achieved self-sufficiency in uranium, and only locally-processed uranium is being used in nuclear power stations. Addressing the inaugural function of the second science conference at Aitchison College in Lahore, he disclosed that Pakistan is processing uranium by itself and making it usable. There are only a few countries that are self-sufficient in uranium. Most countries import uranium to meet their requirements, but Pakistan does not need to do so because it has its own uranium reserves. Uranium is a metallic element that is used as fuel in nuclear reactors or for producing energy.

Ashfaq Ahmed said that Pakistan has been successfully pursuing its nuclear program since 1976, and that Pakistani scientists do not receive any external assistance or cooperation in this regard. They are fulfilling their scientific duty by utilizing their own resources, which is a tremendous scientific achievement. Pakistani scientists and technologists have not allowed the shortage of funds to impede their work. They have built locally several major parts for a nuclear power plant that were previously imported, and have not let external impediments stand in the way of the smooth operation of their program. Pakistan's first nuclear power plant was supplied by Canada some 20-22 years ago, but due to international pressure it soon stopped supplying uranium, the fuel; heavy water; and spare parts. This was a great challenge for Pakistan, which our scientists accepted with great dexterity. They succeeded in keeping the plant operational by utilizing local resources. China is the only country that has provided a 300-kilowatt nuclear power plant, now being constructed at Chashma.

Dr. Ashfaq Ahmed said that we are capable of building nuclear power stations. Nuclear energy is indispensable for Pakistan. Pakistan has no option but to use nuclear technology to increase electricity production, because it cannot meet all of its energy requirements by utilizing such conventional energy production resources as water, oil, gas, and coal. The country is facing the difficulty of power blackouts due to the shortage of electricity.

The nuclear energy chief said there are 6,550 nuclear medicine centers in various countries around the world, of which nine are in Pakistan. Several of these centers will be set up in the country to help diagnose and treat complicated diseases. The private sector will be encouraged to

play a role in this field as well. He added that nuclear technology is also being used in the agricultural field, and 18 new crop varieties have been discovered. Ashfaq Ahmed declared that Pakistan's nuclear program is solely for peaceful purposes.

Nuclear power plants generate 70 percent of the world's electricity. France meets 75 percent of its energy requirements with nuclear power plants. There are 424 nuclear power reactors in the world. Therefore, there is no reason why Pakistan should be asked to desist from utilizing nuclear technology to increase electricity production, improve health care facilities, and boost agricultural production.

As far as the question of rolling back the nuclear program is concerned, it is entirely a political issue, and the nuclear scientists have nothing to do with it. The Chashma nuclear power plant will start producing electricity in 1997-98. Pakistan needs several more similar nuclear power plants. If France had not refused to supply the nuclear reprocessing plant for enriching uranium, Pakistan would have been able to set up nuclear power stations by now. In any case, the country's future energy requirements can only be met through the establishment of nuclear power plants.

Editorial Sees U.S. 'Targeting' Islamic Countries BK0301100194 Rawalpindi JANG in Urdu 2 Jan 94 p 3

[Editorial: "The Atom, American Concern, and Islamic Countries"]

[Text] The distinguished journal ECONOMIST has disclosed that the United States has decided to intensify surveillance of nuclear facilities in Muslim countries because of fears about the possible proliferation of nuclear arms in Islamic countries by the end of this century, and that it will take military action against them if they do not desist from making atom bombs. Pakistan is the only country in the Islamic world that has acquired the capability to manufacture nuclear weapons. According to American experts, Iran is making serious efforts to manufacture nuclear weapons, but it may take eight to 10 years to succeed in this task. Besides, the Islamic countries are so rich with oil wealth that any one of them may become inclined to acquire nuclear weapons.

The apprehensions in the minds of the United States and its allies reflect their thinking and logic. Pakistan has assured the Clinton administration in clear-cut terms that its nuclear program is meant only for peaceful energy purposes, that it does not have any intention of manufacturing nuclear weapons, and that it will adhere very strictly to its policy of not transferring nuclear technology to any other country. Despite this, the United States is not ready to trust these assurances.

Beyond just Pakistan, it is also planning to take to task those Muslim countries that may attain nuclear capability within eight to 10 years, as well as those with the financial capacity to buy such weapons. This clearly shows that to establish world supremacy under the new world order, the United States is targeting Islamic countries by raising the specter of nuclear proliferation. Under one pretext or

another, Iraq and Libya have already been U.S. targets. Other Islamic countries—especially Pakistan and Iran—should work out a common strategy to foil these American designs.

Minister Reportedly Warns of 'Unsafe' Nuclear Project

BK2912123393 Rawalpindi JANG in Urdu 29 Dec 93 pp 1, 5

[Text] Islamabad—According to responsible sources, Federal Minister Sher Afghan Khan Niazi has made sensational revelations to Prime Minister Benazir Bhutto about the 300-megawatt nuclear power plant being constructed with Chinese assistance in Chashma. The federal minister informed the prime minister that the manner in which the 300-megawatt nuclear power plant's monitoring system is being constructed is certainly unsafe, and it may cause a Chernobyl-type situation. The minister told the prime minister 'hat some changes were made in this nuclear power project during the rule of former Prime Minister Mohammad Nawaz Sharif, and that the project is now being built on the basis of [words indistinct] instead of "manufacturing." No Pakistani engineers have been involved in the construction of the project, and none of the 2,800 unskilled workers working on the project is Paki-

The federal minister also informed the prime minister that Japan and the European countries have declined to provide a reliable monitoring system for this 300-megawatt nuclear power plant. Under these circumstances, the monitoring system will have to be built locally. In this manner, the Chashma plant will be used as a laboratory to develop this monitoring system for the first time. This will be very dangerous and may create a situation similar to the one witnessed at the Chernobyl nuclear plant.

Editorial Backs Use of Nuclear Reactors To Meet Power Needs

BK2812100793 Lahore PAKISTAN in Urdu 28 Dec 93 p 10

[Editorial: "Pakistan To Build Nuclear Reactor"]

[Text] Foreign Minister Sardar Asif Ahmad Ali has said that the United States should either repeal the Pressler Amendment or bring India under its purview. South Asia faces a threat from India, not Pakistan, which wants to meet its power shortfall by utilizing nuclear energy. Pakistan has no other option but to build its own nuclear reactor to meet its energy requirements. He made these observations while addressing the 23d graduation and awards ceremony at the Center for Nuclear Studies.

Pakistan is faced with the problem of increasing its power output. The existing resources cannot produce an adequate amount of electricity to meet the requirements of the industrial, agricultural, and trade sectors as well as domestic consumers. That is why the country has to cut power distribution every year, thereby affecting industrial and agricultural production and disrupting people's normal lives. Increasing electricity production is essential

for Pakistan's all-around development. The country's existing thermal and hydroelectric power stations are generating electricity at full capacity; to produce additional power, Pakistan will have to utilize nuclear energy.

France is an example for everyone. That country meets most of its energy requirements with its nuclear power stations. Pakistan can also become self-sufficient in electricity production. The nuclear power plant in Karachi has been running successfully for the past 20 to 22 years, and the expertise gained with this plant can be utilized to operate other nuclear power stations. The country can rely on the expertise of Pakistani scientists and technical experts to build nuclear reactors to generate electricity.

Article Reviews Nuclear Weapons Program BK0901143094 Delhi THE HINDUSTAN TIMES in English 2 Jan 94 p 17

[By Bal Krishna]

[Text] New Delhi, Jan. 1: Pakistan has accumulated sufficient quantity of weapon grade uranium but its nuclear bomb programme is facing serious problems as the country is finding it hard to procure or develop command and control mechanism to trigger and deliver the nuclear device, according to an assessment made by nuclear science experts here.

The experts say Pakistan might have several hundred kgs of weapon grade uranium against the minimum requirement of 15 kg of enriched uranium for a nuclear bomb. But the strategic effectiveness of the Pakistan's nuclear weapons will ultimately depend not so much upon their explosive power as upon the indetectability and accuracy of the delivery system.

The experts say since Pakistan has successfully produced highly enriched uranium, little would apparently stand in the way of its manufacturing nuclear arms except the time that would be needed to develop command and control mechanism to trigger and deliver the nuclear bomb.

They say now Pakistan's efforts to obtain nuclear weapons have gone beyond its production of highly enriched uranium. It has been actively working on nuclear weapons design problems and on the explosive triggering mechanisms and delivery system of nuclear weapons.

Shortly after Pokhran test by India in 1974, the experts say, Pakistan launched a separate effort to acquire the capability for producing highly enriched uranium, the alternative material usable for nuclear weapons.

The key to this secret endeavour was Dr. Abdul Qadir Khan, a Pakistani metallurgical engineer who later became Chief of Pakistan's Atomic Energy Agency. From 1972 to 1975, Mr. Khan worked in the metallurgical section of a Dutch engineering firm, the Physical Dynamics Research Laboratory whose parent company was playing a key role in an ultracentrifuge uranium enrichment plant under construction in the town of Almelo in the Netherlands. The facility was built by the British Dutch-West Germany consortium 'URENCO' to produce low enriched nuclear power plant fuel.

The experts say subsequently it was revealed that Mr. Khan had gained access both to secret technical data concerning the plant's highly classified uranium enrichment process and to detailed lists of equipment used in the facility, all of which he transferred to Pakistan.

Even before Khan had left his post in the Netherlands in 1975, Pakistani nuclear scientists were using the information he had provided to begin purchasing key components for a Pakistani ultracentrifuge pilot plant which was later built in the town of Sihala, south west of Islamabad.

Later, under Khan's direction, Pakistan initiated construction of an industrial scale plant at nearby Kahuta with thousands of centrifuge units. The experts say later Pakistan was able to obtain as much as 100 metric tonnes of uranium concentrate popularly known as yellow cake not subject to International Atomic Energy Agency (IAEA) monitoring from Libya. The material had originally been purchased by Libya from Niger and then reexported to Pakistan.

They say Pakistan's first nuclear power plant, known as Karachi Nuclear Power Project, a 137 megawatt, natural uranium/heavy water reactor purchased from Canada, was completed in 1972. It was subjected to IAEA inspections and has capacity to produce nuclear weapon grade material.

After the 1971 Indo-Pak war, Zulfikar Ali Bhutto, the chief architect of Pakistan's nuclear programme, decided to develop atomic weapons. Since 1973, the country has been making efforts to acquire reprocessing and uranium enrichment technology both overtly and covertly and finally it was able to commission fuel fabrication plant at Chashma which is not subject to IAEA safeguard, the experts say.

The experts say this gave Pakistan a source of plutoniumbearing spent fuel from which the plutonium could be extracted for weapons in the New Labs reprocessing unit (Near Rawalpindi) or the Chashma reprocessing plant.

Pakistan's principal nuclear research centre is the Institute of Nuclear Science and Technology (PINSTECH). It has British-designed reprocessing laboratory with plutonium output and useful for training the country's technicians in this sensitive field.

They say information about Pakistan's uranium deposits is rather inconsistent and sometimes even contradictory. The country has claimed to have discovered uranium resources in Ghazi Khan Thalkot, Azad Kashmir and Cholistan, with an estimated total of several hundred tonnes.

The experts point out that in light of aid from a neighbouring country and Pakistan's years of weapons design work, a test may not be necessary for the country to have confidence that the nuclear arms will work. There are number of other reasons which suggest that Pakistan will refrain from declaring that it possesses nuclear arms, the experts added.

SUDAN

Iraqi, Iranian Radar, Missile Experts' Presence Noted

NC2912205893 Cairo AL-WAFD in Arabic 26 Dec 93 p 9

[Spelling of all place-names as published]

[Text] Port Sudan—Sources from our Sudanese brothers in the city of Port Sudan affirm that the area of the Red Sea mountain range is currently witnessing a large influx of Iraqi experts working under the cover of prospecting for oil, when everyone knows that Iraq does not have any technology to dig for oil. Specially informed sources in the eastern region affirmed that investigations have proven that the Iraqis there are experts in missiles, defense systems, radar, and planes.

The first post where the Iraqis are stationed is in Madabay in Khawr Ashraf and Port Sudan city. This region was more or less a marginal station for radar before the coup by the Islamic Front. Recently, it has been reinforced with highly developed equipment, as well as computers. The region is experiencing strict security measures and 24-hour

armed patrols roam around it. Shepherds and Arab nomads have been completely removed from the area within a 60 km circumference.

The region of Dalawat on the Red Sea near the city of Hala'ib also has an Iraqi presence. The identity of the people is unknown and strict security measures are also in force. In addition, there is a station at the town of It, parallel to the city of 'Arus al-Sahaliyah where there are some Iranian elements.

Alleged Iraqi experts were also seen in the region of Karnakanat on the northern coast of the city of Tawkar.

This is a region for prospecting for natural gas. The contract of a French company working in this area was terminated.

Some armed boats belonging to the Sudanese Navy are also in the same region supervised by Iranians.

In addition, our sources confirm Iraqis are supervising the development of the secret airport in Udrus, west of al-Wihdah district, the last district of Port Sudan. This region is surrounded by special forces and shock troops to secure the area.

REGIONAL AFFAIRS

Twenty-Seven Belarussian SS-25 Missiles To Be Dismantled in Russia

AU2212142593 Paris AFP in English 1359 GMT 22 Dec 93

[Text] Minsk, Dec. 22 (AFP)—Twenty-seven strategic SS-25 missiles of the 81 deployed in Belarus have been withdrawn from this former Soviet state for dismantling in Russia, the Belarussian defense ministry said Wednesday.

The 27 missiles, whose withdrawal was completed Wednesday, came from the strategic Postavi dvision in the north, the head of ministry headquarters, General Nikolai Churkin, told AFP.

The 54 other missiles still stationed in Belarus, which are based with two other divisions, must be withdrawn before the end of 1996, according to bilateral accords between Russia and Belarus, both signatories of the 1991 START I strategic disarmament treaty.

Belarus is one of four former Soviet republics with nuclear missiles stationed on its territory, in addition to Russia, Kazakhstan and Ukraine.

Uranium Smuggling Attempt Thwarted

PM2912142793 Moscow KOMSOMOLSKAYA PRAVDA in Russian 29 Dec 93 p 1

[Report by Igor Neshcheretnyy and Aleksandr Milkus under the "Scandals" rubric: "Package Containing Uranium"]

[Text] Odessa—Officers of the Black Sea Internal Affairs Administration Transport Criminal Investigation Department of the Ukrainian Ministry of Internal Affairs have carried out an operation of a kind that is rare nowadays. They managed to track down and catch red-handed a group of "businessmen" attempting to export abroad 260 capsules containing uranium-235 and uranium-238. This element is the fuel for nuclear electric power stations.

According to the operations data, the leak of the nuclear raw material occurred at a Kazakhstani enterprise. The cargo was first conveyed to Chisinau in a homemade lead container. And only when the definite date of the handover of the uranium to the purchaser became known was it delivered to Odessa.

The smugglers prepared the operation thoroughly. They agreed with members of the crew of a Black Sea Steamship Company vessel that the container would be delivered on board shortly before the vessel's departure for foreign parts. It was there, in the port, that one of the "businessmen" was to meet the purchaser. This member of the gang was detained on his way to meet his client. He was found to be carrying uranium samples in an ordinary coffee jar. A search revealed that this courier was carrying the genuine certification of an Afghan war veteran and, no less, a Hero of the Soviet Union.

As of today six people have already been detained. Two are Moldovan citizens, four Ukrainian. Most of them are scientific research assistants.

A search of one apartment uncovered a further 100 kilograms of mercury and a few kilograms of rare-earth metals. While this search was going on, the owner of all these riches was holding a live grenade in his pocket. Fortunately, he did not decide to use it.

The investigation established that they wanted to sell the uranium for U.S. \$200,000 (according to rough estimates, the price of this consignment of uranium on the world market is around \$20 million). The purchaser himself was from Siberia. But where he planned to deliver the cargo is not yet known. There are hopes that criminal investigation officers will detain the purchaser too.

The ease with which the uranium was delivered in its container to the airplane steps [as published] proves that it is not for nothing that the West is worried over the illegal export from CIS territory not only of the "brains"—the nuclear physicists—but also the raw materials of the nuclear industry.

Baykonur, Military Accords With Kazakhstan Detailed

PM2712201593 Moscow KRASNAYA ZVEZDA in Russian 28 Dec 93 p 1

[Report by Anatoliy Ladin and Oleg Falichev: "Russian 'Nuclear Umbrella' Under the Kazakh Sun?"]

[Text] The talks between the delegations of the Russian Federation and the Republic of Kazakhstan in Almaty ended on 25 December. A considerable part of those talks was devoted to military problems.

On the basis of the results of the meeting the heads of governments signed among other things the memorandum "On Mutual Understanding on Questions of Ensuring the Functioning of the Baykonur Space Center." Commenting on the documents presented for signing, Viktor Chernomyrdin, chairman of the Council of Ministers-Government of the Russian Federation, noted that they now make it possible to carry out all work at the space center normally and determine the procedure for the shipment across the border of the goods necessary for work to be conducted at Baykonur. The Russian military contingent is remaining here and its daily life and activity will be governed by Russian laws.

Viktor Stepanovich also added that the heads of the Russian and Kazakhstan governments have been instructed by those states' presidents to prepare documents on military and military-technical cooperation in January 1994.

What does the memorandum say? It is important that it speaks not only about the space center but also about the test ranges sited on the territory of the Republic of Kazakhstan and about military cooperation. It is envisaged that Russia will use the military installations under lease from the Republic of Kazakhstan. In this regard the operation of the Baykonur space center and the test ranges will be ensured by the Russian Government or authorized organs of

state administration. The Russian military formations supporting these installations are stationed on Kazakhstan's territory temporarily. Their status will be determined by a separate agreement.

During the talks process the heads of the Russian and Kazakhstan governments expressed mutual satisfaction at the fact that the Republic of Kazakhstan has affiliated to the nuclear weapons nonproliferation treaty as a state not possessing nuclear weapons. The Russian side has expressed a readiness to offer guarantees of safety to Kazakhstan as a nonnuclear weapon state together with other depositories of the nuclear weapons nonproliferation treaty and at the same time to give military assistance if necessary to repulse external aggression and to counter other encroachments on the security and territorial integrity of the Republic of Kazakhstan.

The sides recognized the need to begin holding bilateral talks on the implementation of the START I treaty and the package of Lisbon accords as well as the need to agree a timetable in the very near future for the withdrawal of all the nuclear warheads in the Republic of Kazakhstan to Russian territory.

At the talks the sides also examined questions of scrapping the strategic offensive weapons stationed in Kazakhstan and to reimburse the republic the equivalent value of the fissionable materials and components of the nuclear weapons and so forth.

As we can see, they relate to the most acute and vital problems affecting the life and service of Russian servicemen in this republic. The fact that the ice has finally been broken here is perhaps the most important outcome of these talks. After all, people in uniform, for all their discipline and composure, must have clear prospects and guarantees of social and legal protection. Here, you would think, there is still broad scope for the work of the politicians and lawyers: In addition to Baykonur and the ranges there are other Russian military units stationed in Kazakhstan. For example, it has part of the missile early warning system. Status and the conditions for continued presence abroad must be defined for these units, too. Meanwhile, unfortunately, all they can do is wait and hope.

Brazauskas, Kravchuk Discuss Nuclear Security LD1801130994 Moscow ITAR-TASS in English 1130 GMT 18 Jan 94

[By ITAR-TASS correspondent Vladlas Burbulis]

[Text] Vilnius Jan. 18 TASS—Lithuanian President Algirdas Brazauskas told the Ukrainian President Leonid Kravchuk by telephone on Tuesday that Lithuania welcomes a tripartite agreement on the liquidation of nuclear weapons on the Ukrainian territory recently signed in Moscow, the pressservice of the Lithuanian president reported.

The Ukrainian and Lithuanian presidents expressed the hope that this agreement would increase security in the region of Central and Eastern Europe and be an important step towards general nuclear disarmament, the same source said.

During the conversation the two presidents discussed bilateral relations and prospects for signing a treaty on friendship and cooperation between the two countries.

Brazauskas invited the Ukrainian president to pay an official visit to Lithuania in february, 1994. The invitation was accepted with gratitude, the press service said.

RUSSIA

Agreements Needed on Missile Warning System PM1101102194 Moscow KRASNAYA ZVEZDA in Russian 10 Jan 94 p 2

[Oleg Falichev article: "View of the Problem. The President's Eyes and Ears, or How the Missile Attack Early Warning System Operates Following the Breakup of the USSR"!

[Text] The top-secret missile attack early warning system [MAEW] was certainly assigned a special role among the strategic deterrence systems developed in the USSR during the Cold War years. Why? It provided the president, the country's military-political leadership, and the command of the branches of the Armed Forces with the information needed to adopt a definitive decision regarding the use of nuclear missile forces. That is, it can be said to have been in the direct sense of the word the eyes and ears of the country's leadership.

Today the Cold War is behind us. The Soviet Union does not exist. Many over-the-horizon [OTH] tracking stations, the basis of the MAEW, have ended up over the border. Lastly the geopolitical position of Russia itself has changed. How has all this affected the combat readiness of the system and the lives and service of the troops?

Here were are on the outskirts of Moscow. The trees are covered with snow. An outwardly unremarkable building, which has so to speak been legendary for many years. This is an MAEW command post, and no journalist has set foot inside it in its entire existence.

Inside the light is dim and the duty shift wear soft footwear. There are telephones to the defense minister and the chief of the Russian Federation Armed Forces General Staff on the duty officer's desk.... Opposite stands a huge panel, the size of the screen at Moscow's "Rossiya" Movie Theater, indicating the operational situation, the movement of space objects, and the status and operation of OTH tracking stations tracking near-earth space, satellites in near-earth orbit, and all launches of carrier missiles that come within the zone of visibility.... Figuratively speaking, the key to our strategic security is here in this room....

It is here that the alarming inscription suddenly flashes from time to time (for training purposes): "Stand by. Launch. Missile Attack." Whereupon it gives the launch site, the number of missiles, and where they are targeted.... This information automatically enters the special "Krokus" device which is then used to activate the "nuclear attache case" held by the country's president. At the same time it is accompanied by an audio signal, which was said to have

irritated M. Gorbachev a great deal. This is said to have ended in the "Krokus" being rapidly removed from his office.

As for the people stationed at the command post day and night (the duty officer, the systems analysts, and officers in the analytical service...), throughout the Cold War they were destined to be the first to learn of the start of the nuclear apocalypse. Cynical as it sounds, their job is to anticipate nuclear war.

Information comes into the multicolored command post panel today from eight MAEW stations, five of them located abroad: in Ukraine (Mukachevo and Sevastopol), Azerbaijan (Mingechaur), Kazakhstan (Balkhash), and Latvia (Skrunde). They are still providing information, but what guarantee is there that it will not suddenly stop one fine day?

The development and creation of OTH MAEW and space surveillance radars began in our country in the sixties at the USSR Academy of Sciences Radiotechnical Research Institute under the leadership of Academician A.L. Mints. The first "Dnepr" stations were deployed in Kazakhstan and Siberia, forming a tight radar barrier 5,000km long ensuring the accurate detection and tracking of space objects. During the seventies it proved possible to expand the radar field by including stations in the polar region, Latvia, and Ukraine.

A plan was then developed for total, continuous OTH coverage in the missile-vulnerable western, southwestern, southern, and northeastern sectors. At the same time work was also under way on a fundamentally new phased-array OTH radar station called "Daryal"....

As we can see, the system was progressively built in missile-vulnerable areas. Needless to say, at the time no one thought that the Union would break up and that the radar field erected would be bisected by the national borders of sovereign states. Or that they would de facto end up under Russia's "nuclear umbrella." However, now the question is this: Do the republics need these services today? And, if so, on what terms? If not, what is to be done with the stations?

Regrettably these are not idle questions, since there are still no clear accords in this sphere or clear prospects. Admittedly there is the Treaty on Collective Security signed by six CIS states. But "nothing is forever".... Remember the promises about the unified ruble, economic, and information area. What has happened to all that? Is it true that the future of these stations and maybe the future of the MAEW is today being decided not only in Moscow but also in the CIS nation states?

...The Balkhash area, where an MAEW unit is stationed, greeted us with cold gusts of wind and snow. A strange building like a gigantic hut rose above the wild semidesert.

"Our new 'Daryal' looks strange and, you'll agree, impressive," Colonel G. Kozlyuk, deputy commander for work with personnel, broke into my thoughts. "The only thing is that the construction workers and fitters are unable to hand it over. So at the moment we are working with a 'Dnepr."

Vast sums of money at the old prices have been invested in the station— around 1 billion rubles. It is a reliable radar. It has triple-redundant technological apparatus, several independent power sources, and space, radio, and facsimile communications.... It provides highly important information about ballistic missile launches, identifies objects during the booster phase of their flight path, and can instantly compute warheads' launch and landing sites as well as their flight time....

"We provided backup for the 'Soyuz-Apollo' flight and all flights from Baykonur and obtained information on 'Ferret' [as transliterated], 'Columbia,' and the shuttle," Colonel N. Buchuk, deputy commander for arms, said not without pride.

The MAEW has never given a false alarm regarding a missile attack (unlike its U.S. counterpart). But the "Dnepr's" have virtually outlived their service life, working continuously throughout this period.

It became clear that the almost complete new "Daryai" station is not at its best.

"Everything is vague now," Deputy Chief Designer Yu. Konkin, who leads a wretched life here now with an uncertain future, told me. "So it is not surprising if the equipment gradually gets neglected...."

Regrettably, signs of this neglect are already striking, to whit "explosive" old electric cable in the living quarters, empty shelves in the military trading store, the boarded-up windows of empty apartments, and the lack of clear guarantees for the officers that they will be provided with amenities in Russia.... Major General Yu. Kabakov, army deputy commander for rear services, involuntarily added to the picture by citing the following figure: "Compared with past conditions, supplies to our units in neighboring countries have dropped by around 40 percent, although the tasks have remained the same."

The various restrictions on the movement of freight and property and the confusion over supplies represent another barrier. In terms of some categories the unit remains on Kazakhstan's payroll, whereas as far as others are concerned it has been transferred to the Ural Military District. Realistically at the moment the unit doesn't know whether it is coming or going. And virtually everything—from uniform badges to pipes—has to be brought by air from Moscow. You can imagine the kind of megabucks this costs, but there is evidently no other option at the moment.

Needless to say all this cannot fail to affect the people, their mood, and ultimately their attitude to their work.

It is becoming more and more difficult to get replacements for these units from Russia, Colonel Ye. Tokarev, head of the army cadre department, thinks.

Nonetheless at the moment, we would stress, all this is only indirectly affecting the unit's combat readiness. A commission from the Center led by Major General V. Pronov, the formation's chief of staff, came here to work and pointed to the reliability of the whole complex. It investigated a great deal and set a great deal to rights, so to speak. The unit

received good marks, but its status remains unchanged. "We have no future here...," one officer told me bluntly.

Why is that happening in our country? The people who have to "pull" the strategic installation out of the mire without receiving proper pay, in many respects through personal initiative and self-restraint, should be rewarded, but they "have no future." Why did we make such a mess of the identical installation in Krasnoyarsk, owing to then Foreign Minister E.A. Shevardnadze's, so to speak, tractability and under pressure from the Americans, and why are we now turning it into...a furniture factory? At a time when the United States has not just failed to mothball its long-range tracking radar in Greenland but has even modernized it and has absolutely no intention of cutting back its other stations.

The U.S. BMEWS ballistic missile early warning system is established and operating. It comprises three posts on Fylingdales Moor (Britain), in Thule (Greenland), and in Clear (Alaska), which have been modernized in recent years to enable the system to detect missiles at long range. This system uses a multifunctional Precision Approach Radar station comprising a "Safeguard" ABM defense system. During the eighties more powerful assemblies of the Pave Paws OTH stations were deployed on U.S. eastern and western seaboards and southern borders. The NORAD command post in Colorado Springs exercises operational control of the entire nuclear missile early warning system.

There is also a first-echelon tracking missile launches and engaged in nuclear burst fix acquisition—five "IMEWS-2" artificial earth satellites in orbit at distances of 30,000-40,000 km. This system still monitors the entire surface of our planet, including Russia and the CIS. And in spring 1993 during the Western European Union's military and scientific conference the question was raised of creating a European ABM defense system (EUROWISAT) combined with similar U.S. systems. Its deployment is scheduled for the year 2005.

So the breakup of the Union cannot so far be said to have had any effect on the MAEW. But there are problems, as we can see. Above all, the question of the status of MAEW units abroad needs to be resolved most speedily. Regrettably, everything is not as easy as we would like. Kazakhstan, for instance, has a bone to pick with the Russian military over use of its airspace, fulfillment of customs regulations, etc. But that is not the main thing. Major General A. Kasymov, chief of the Main Staff of the Kazakhstan Armed Forces, gave his view of the problem as follows: "The question of the future of the MAEW unit is in my view linked to the question of Kazakhstan's accession to the 1972 ABM Treaty. We know the Russian Federation's stance: People say that Kazakhstan cannot be a party to the treaty because it does not have the status of a nuclear state.... But this treaty must be reviewed today to take account of the opinions of states with elements of the strategic nuclear forces stationed on their territory It is therefore necessary to lay down new conditions for the creation of the 'nuclear club,' either on a multilateral basis or on a bilateral basis with Russia. And to record these in a corresponding protocol like the Lisbon Protocol"

S. Tyurin, Russian consul in Kazakhstan, is inclined to think that Russia should be quicker in making up its mind about the status of the MAEW military unit in Kazakhstan: "I am not a military man, but I believe that this unit is a very important installation, spearheading scientific and technical progress. And failure to pay attention to it will cause us a setback just like the earlier setback with Baykonur in terms of the space program. At the moment—this is a fact—the military are surviving here as best they can. You cannot describe them as occupiers, since their main weapon is radar equipment...."

Everyday material and technical difficulties are a minor misfortune. It is their uncertain status that is causing discord among the officers and the personnel. The republic has after all adopted a law laying downm that anyone who does not apply for other citizenship by I March automatically becomes a citizen of Kazakhstan.... So you can understand their position. And, moreover, that of their wives and school-age children, who are not particularly enthusiastic about the need for mandatory study of the Kazakh language in local schools or about obtaining secondary education certificates here. Not to mention the fact that there are Kazakhstani security and prosecutor's office organs at the garrison.... Colonel General (Retired) Yu. Votintsey, one of the people who developed the MAEW system, believes that a sorry fate lies in store for these installations if the problems are not resolved. "The outdated 'Dnepr' stations will be able to operate for another two or three years, six years at most, and then the whole Commonwealth will be left without some of the most accurate means of detecting attacking missiles." However, owing to the dismantling of the Krasnoyarsk radar a gap has already formed in our OTH tracking systems in the northeast of the country. Therefore, logic itself suggests that it is necessary to at least preserve what is left.

"The point is that the highly effective system only works when it receives information from all OTH tracking stations. It would therefore evidently be right for the MAEW to be not a national but a supranational system," Lieutenant General S. Sokolov, MAEW army commander, said. "But, naturally, with other CIS countries taking a shared financial part in running it."

The Main Staff of the Air Defense Troops takes a similar view.

"Whether we need this installation or not is not under discussion," Colonel General V. Smirnov, commander of the missile-space defense troops, said. "But, in order to resolve the problems arising there, an agreement is first needed on Russian-Kazakhstani military cooperation—an agreement which is not yet in place."

Well, this would evidently be the optimum solution to the very difficult situation that has developed since the breakup of the USSR as far as preserving the MAEW installations is concerned. It is after all easy to destroy things—something that we have repeatedly seen over the last few years—but it is hard to create them. The MAEW embodied the best achievements of many generations' intellectual potential.

And, however stable the world may be today, it was, is, and remains a crucial deterrent against the unleashing of a nuclear missile war.

A final point. A session of the Russian Federation Defense Ministry Collegium was held recently. It analyzed the results of the Russian Federation's military cooperation with neighboring states and identified tasks for 1994. It was stressed that, as a result of joint work on the part of the Russian Federation Defense and Foreign Ministries, a normative-legal base has by and large been created for military-political and military-technical cooperation with the republics of the former USSR. It was pointed out at the same time that, in view of Russia's strategic interests in this sphere, there are still plenty of unresolved questions.

It only remains to hope that the necessary decisions on strategic arms will not be shelved. After all, the fate of the military and their relatives and friends depends on them. And ultimately the reliability of Russia's defense itself.

Multipurpose Nuclear-Powered Submarine Under Construction

LD1701104994 Moscow ITAR-TASS in English 1025 GMT 17 Jan 94

[By ITAR-TASS correspondent Roman Zadunaiskiy]

[Text] Moscow January 17 TASS—The Russian Defence Ministry is financing the building of a multi-purpose nuclear-powered submarine at the Sevmaspredpriyative Production Association, First Deputy Defence Minister Andrey Kokoshin told journalists today.

Kokoshin said that despite financial straits Russia continues to build ships for its navy in line with the updated naval doctrine

Kokoshin stressed that Russia has legitimate interests in different parts of the world ocean and needs surface vessels and submarines of all kinds to safeguard these interests. He said the new multipurpose submarine is designed to support combat stability of strategic missile-carrying submarines and execute other assignments in the ocean.

According to information provided by the naval headquarters of Russia, several big ships are to become operative in 1994, including the heavy aircraft-carrying cruiser "Peter the Great."

Correspondent Views Plan to Dismantle Nuclear Submarines

OW2712165693 Vladivostok Radiostantsiya Tikhiy Okean Maritime Network in Russian 0815 GMT 2 Dec 93

[From the "Pacific Ocean" Program]

[Text] Folk wisdom says that a promise takes three years to keep. Sovetskaya Gavan residents have found this saying to be true. A decision was adopted exactly three years ago to withdraw nuclear submarines from the Sovetskaya Gavan Bay. This decision was adopted by the Pacific Fleet command and by the former commander Admiral Khvatov personally, under public pressure. However... our correspondent Yevgeniy Chuyev comments on this significant date.

[Begin recording] Chuyer: Military chiefs had promised to begin a gradual withdrawal of the dangerous submarines from the teeming waters of the bay by 1991. The rest of story proceeded as usual, and the situation just dragged on. You might remember an old joke: The important thing is not to achieve anything, but to show a readiness to do so; after an order is given, the main thing to do is to say: Yes, sir! The year 1991 was noted for the turbulent political events in our country, and for the August putsch attempts. The year 1992 saw economic collapse and financial failures of well-intentio ed schemes, such as the intention to withdraw the submarines. As this year was nearing its end, money was finally found for the withdrawal of the first submarine. Here is where the problem started. As some officers have said, this is how it started: A submarine arrived at one of the restricted factories of Maritime Kray-or, to be exact, in one of the Maritime Kray units. The moment it arrived they shouted: We cannot accept you, there is no place we can put you. In short, the submarine was received like a stepdaughter: it was supplied neither provisions nor water, and the sailors had to carry their own provisions just to survive. Allow me to quote a part of the story as told by Captain Third Rank Aleksandr Orlov, who witnessed it all first hand. He said: "People who work at the factory are not practical, and the principle of pay before work is very well rooted here. It is called early pay nowadays. However, even this solves nothing because first, there was no [word indistinct] conversion order-namely, for disarming the submarine; second, the floating pier where the submarine was supposed to dock was missing third, the submarine was considered to be cruising independently still, and thus had not really arrived. Can you believe it? Although they say that the situation at the factory has calmed down, the crew still wonders about its future."

The submarine will leave the factory and head to [words indistinct], where it will await its turn to be dismantled. Considering the fact that the waiting line is very long, it is safe to assume that the grueling waiting and ordeal will drag on for years. But what about the others? After all, three more nuclear submarines remain in Sovetskaya Gavan, and there are many more in the Far East region's waters. Undoubtedly, it is simpler just to build submarines than to think of a proper way to dispose of them. This situation involves ethical issues as well as material ones. It is not the sailors' fault if someone failed to think of their future. But as for civilians-people like you and me, those who live on the coast-we should not also be forced to carry the burden of nuclear hostages and bad planning. The submarines have certainly done no wrong, and after faithfully serving the Motherland, they have the right to eternal peace without having to undergo the current ordeal and tribulation. We have waited patiently for three years, but the promise is sticking in our throats. [end recording]

Novovoronezh Nuclear Power Engineering Plant Diversifies

OW2912015293 Moscow Ostankino Television First Channel and Orbita Networks in Russian 1945 GMT 15 Dec 93

[Vladimir Foshenko video report from Voronezh; from the "Utro" program]

[Text] The Novovoronezh Atomenergozapchast Association has experienced in full the mania for creating gigantic domestic industries. Even when the former union was undivided and all its nuclear electric power stations [AES] were operating normally, insufficient orders could be found to operate the plant and its production capacities to the full. The Chernobyl catastrophe and the subsequent suspension of construction of new AES power units for an unspecified time undermined the already shaky economy of the enterprise. [Video shows workers handling metal rods and components on a production floor]

Today its main output, components for nuclear reactors, makes up only 22 percent of its overall production volume. The plant found itself unable to maintain its enormous auxiliary capacities. When this happened three years ago it was decided to shift them into independent organizations with their own full measure of responsibility and an independent bank account. They were told in as many words: So, if you want to survive, here is the necessary minimum order from the plant, find the rest of your profits yourselves. [video cuts to show Foshenko interviewing V. N. Sukhoverkhov, general director of the "Atomenergo-mash" Production Association]

[Begin Sukhoverkhov recording] My main task is marketing. I mean looking for orders and markets for the products of the enterprises comprising the production association, now and in the future. I have absolutely no interest in anything concerning the internal operations of these enterprises. [end recording; video cuts to show a worker handling automobile window glass]

So machine tools and equipment not related to the basic needs of nuclear power engineering appeared on the previously empty production floors of the enterprise, which never did reach design capacity. A wood processing shop began turning out furniture; production started of glass for all types of automobiles, including imported ones; a sausage shop, and a shop for plastic goods were inaugurated; and a whole plant for disposable syringes was built. [video again shows Sukhoverkhov]

[Begin Sukhoverkhov recording] As far as our prospects are concerned, they include the preparing the way for the creation of new production facilities. We are seeking to attract investors to build these new production facilities. [end recording]

From a previously unified plant, six production groups were formed. They remain, however, a single production mechanism. Next year it is planned to double the number of these enterprise.

Russia Seeks Arms Exports to New Areas

LD2812113393 Moscow Radio Rossii Network in Russian 0435 GMT 28 Dec 93

[Text] Viktor Glukhikh, chairman of the Russian Committee for Defense Industries, has said Russia has no intention of bowing out of the world arms market. The country is prepared to compete with others, and that goes also for those markets where Russia has not previously been represented.

New Technology Developed To Destroy Chemical Weapons

LD2912225893 Moscow ITAR-TASS in English 2001 GMT 29 Dec 93

[By ITAR-TASS correspondent Veronika Romanen-kova]

[Text] Moscow December 29 TASS—The Russian Central Machine-Building Research Institute has demonstrated a new method of destroying chemical weapons today, using conversion technologies of the missile and space complex. The method was developed in the framework of the state scientific-technical programme "security."

Member of the Academy of Natural Sciences, A. Panushi, pointed out in his report that the new method is based on rendering safe super-toxic substances, including chemical weapons. This thermal-chemical technology has considerable advantages over domestic and foreign technologies based on a conventional low-temperature and plasma combustion. The newly designed method relies on the principle and instruments used in rocket engines.

Apart from technologies, the process of the destruction of main components of chemical weapons was demonstrated using an experimental installation designed by the Central Machine-Building Research Institute of the Russian Space Agency. A mobile model of this installation makes it possible to destroy chemical weapons and other supertoxic substances directly in their storage places.

Russian minister for the environment, Viktor Danilov-Danilyan, and vice-president of the Russian Academy of Sciences Konstantin Frolov, who took part in the discussion of the new method, pointed out the importance of conducted experiments and their prospects both for Russia, the CIS and other countries.

New Generation Guided-Missile Submarine Under Construction

LD2912212293 Moscow ITAR-TASS World Service in Russian 1724 GMT 29 Dec 93

[By ITAR-TASS]

[Text] Severodvinsk (the Arkhangelsk region of Russia) 29 Dec TASS—An undersea nuclear-powered guided missile cruiser of a new (fourth) generation was laid down at the construction berth of the center of atomic shipbuilding in the Russian city of Severodvinsk on Wednesday. The ocean-going submarine will carry the name of this city, located on the shores of the White Sea.

For 54 years, shipbuilders of this city have built about 100 nuclear-powered submarines. It will take shipbuilders several years to construct this nuclear-powered missile-carrying submarine.

Minister Believes Arms Exports Can Double in 1994 LD3012113193 Moscow Radio Moscow in Russian to Tajikistan 0415 GMT 30 Dec 93

[From the Slakyanka Radio studio of the Russian Defense Ministry]

[Text] Minister of Foreign Economic Relations Oleg Davydov believes Russia has the potential to double its exports of military equipment in 1994. In 1993, Russia's arms exports amounted to \$1.2 billion. The work that has been accomplished has laid the foundation for future contracts, for example the supply of MiG-29 fighters to Malaysia. New opportunities in arms exports are opening up with the setting up of the Rosvooruzheniye [Russian Armaments] company. Its task is to amalgamate Russia's main exporters in military equipment and to coordinate their activities.

Chelyabinsk-65 Radioactive Waste Is 'Very Complex Problem'

PM0501095794 Moscow Ostankino Television First Channel Network in Russian 1800 GMT 25 Dec 93

[From the "Novosti" newscast: Video report from Chelyabinsk-65 by Sergey Sergeyev and Viktor Sosunov, identified by caption]

[Text] Sergeyev: [over video of Mayak Chemical Combine exterior, interior] Shortly after the war, weapons-grade plutonium for the first Soviet atom bomb was obtained here at the Mayak Chemical Combine in the secret city of Chelyabinsk-65. Over the past 40-plus years more than 1,000,000 curies of radio-nuclides have accumulated here on the industrial site of one of Russia's major defense complexes in water reservoirs and special technological storage facilities. They present a serious threat not just to the Urals region but the whole planet.

Academician N.P. Laverov: [vice president of the Russian Academy of Sciences, identified by caption] This is a very complex problem. There has been nothing like this in the history of mankind. There has never been such an accumulation of radioactive waste. Therefore any step which is taken now demands careful scientific substantiation.

Sergeyev: The Russian Government has adopted a program for the rehabilitation of the contaminated areas in the southern Urals. Scientists have been assigned an important role in its implementation. A session of the scientific and technical council has been held at Chelyabinsk-65, where specialists discussed the results of the steps taken in the year that is ending and elaborated tactics for combatting the dangerous radio-nuclides for the coming year. [video shows exterior, interior of Mayak combine facilities, conference]

Problems of Nuclear Missile Maintenance Aired PM0701165594 Moscow KRASNAYA ZVEZDA in Russian 6 Jan 94 p 2

[Aleksandr Dolinin "Reportage for This Issue": "First Aid' for Missiles"—first three paragraphs are introduction]

[Text] Hundreds of ballistic missiles "held" by the Strategic Missile Forces are on alert duty in Russia. Russian missilemen also have a headache over the launchers stationed in Ukraine, Kazakhstan, and Belarus. They have plenty of trouble with this whole "nuclear missile business."

Missiles, which are packed full of electronics and fuel and have nuclear warheads, require constant surveillance and care, particularly in the event of the aging and the malfunctions which are making themselves felt increasingly clearly today, given the meager funding, depleted spare parts, tools, and accessories kits, the destroyed collaboration within the former Union, the customs obstacles....

In these conditions specialists locally and at the operational-technical control center of the Strategic Missile Forces, which our correspondent visited, are operating a "first aid" system.

Operational-technical control centers appeared in the Strategic Missile Forces High Command and in missile large strategic formations and combined units several years ago. They proved their viability in auspicious times, and in the present times—with universal shortages—they have proved simply essential.

"Such a center in the Strategic Missile Forces High Command," Lieutenant General Vladimir Nikitin, deputy commander in chief, believes, "is the eyes and ears of the forces' leadership. Here measures are taken to rectify the simplest fault in missile hardware and, if necessary, major technical decisions are worked out."

The center itself is housed in small, well-equipped premises. Nothing here is superfluous. Showing me round his facility, Lt. Colonel Mikhail Poludnitsyn, the center's chief, drew attention to the alert-duty personnel's posts and the collective electronic panel. The latter highlights information on the faults which have arisen, down to each individual launcher, gives their characteristics, and shows the time of reinstatement of "indisposed" missiles and protection systems. All this is conveyed via a computer link to the display units of chiefs of directorates and services.

The alert-duty personnel are headed by Col. Yuriy Surnin, who is assisted by two Alekseys—Captain Kotlyarevskiy and Senior Lt. Klychnikov. Col. Vladimir Bezgreshnov, preparing to take Surnin's place, unhurriedly bones up on the situation. Engineers are on duty round the clock, being operationally subordinate to the Strategic Missile Forces Central Command Post.

I asked Surnin to assess the condition of the missile armament and hardware over the past 24 hours.

"Twenty launchers (more than half of them outside Russia) required prompt [operativnyy] intervention," he said. "On one, for example, an instrument has failed." On this score he reported: Measures have been taken, and the instrument is being delivered to the launcher by courier from a store in one of the divisions. The alert-duty personnel knew the train's number and were monitoring the officer's time of arrival in the unit and the hardware's readiness to receive him.

"We strive for stability, operational efficiency, secrecy, and continuity in the center's activity," Lt. Col. Poludnitsyn emphasized.

This is achieved not only by constant alert duty but also by means of the planning meetings conducted on a daily basis by Lt. Gen. Anatoliy Perminov, chief of the Main Directorate for the Operation of Missile Armament, and on Saturdays by Lt. Gen. Vladimir Nikitin, deputy commander in chief, directly at the operational-technical control center

Invited to the meetings are leading specialists of main directorates and officers of the state technical supervision, communications, the motor vehicle service.... Such representation has entirely justified itself. This staff of professionals resolves all problems. It is only when these fall outside the competence of the deputy commander in chief that direct application is made to the commander in chief of the Strategic Missile Forces himself.

The Saturday conference at the center was held in a calm working regime, but you could sense the anxiety and inner tension of the people gathered there. There are quite a few problems in Russia, so it turned out, and things are still more difficult in the event of equipment malfunctions in Ukraine. There are more malfunctions in just two missile divisions there than in all the Missile Forces. Technical decisions on them have been worked out in good time, and the Ukrainian side has not rejected them; but it cannot implement them. There are not the material and financial means or even the fuel to enable the routine inspection and maintenance crews to travel to the launchers.

Problems also arise in the divisions in Kazakhstan. For example, instruments intended for the automated systems for the protection of nuclear weapons are not allowed through customs. Whether they like it or not, the "technical personnel" are also required to be diplomats and prepare requests to the Main Customs Administration.

On visiting the operational-technical control center I saw for myself that an unwritten law exists among the missilemen: Don't leave a missile until a malfunction has been rectified. Those on duty in the control center and those who work with a wrench directly in a combat position really are like "first aid" for nuclear missile weapons.

Number of Emergencies in Nuclear Industry Drops LD0501213694 Moscow ITAR-TASS in English 1740 GMT 5 Jan 94

[By ITAR-TASS correspondent Veronika Romanenkova]

[Text] Moscow January 5 TASS—The number of unplanned shut-downs of nuclear reactors in Russia has dropped by 50 percent in 1993 since 1992 when 54 such shut-downs were registered, Yevgeniy Ignatenko, vice-president of the concern Rosenergoatom, said.

In an interview with ITAR-TASS on Wednesday, Ignatenko said that the number of emergencies caused by human error also decreased sharply from 14 in 1992 to six in 1993.

He believes this is the result of the implementation of the state programme of modernisation of nuclear power plants in Russia and re-training their personnel. However, the lack of funds to buy necessary spare parts and introduce new technologies still remains a serious problem.

Ignatenko stressed that last year was very difficult for the industry. Nuclear power stations are owed by the consumers about 260 billion roubles for 1993. This forces nuclear plants to take credits to buy fuel and equipment and pay salaries.

BELARUS

Official Interviewed On Construction of Waste Burial Sites

WS2712135893 Minsk RESPUBLIKA in Belarusian 18 Dec 93 p 11

[Interview with Aleksandr Grebenkov, head of the laboratory of the Institute of Energy Problems at the Belarusian Academy of Sciences, by Yevgeniy Rostikov; place and date not given: "Will Waste Dumping Be on the Sun, Too?"—first paragraph is RESPUBLIKA introduction]

[Text] Today, when those in our Republic who suffered so much from the "peaceful atom" are more and more loudly voicing demands for more Belarusian nuclear power stations, the position of Vitaliy Trubnikov seems very representative. I am not going to discount the contention that the "risk levels of operating nuclear stations is very low." This calls for a separate and serious discussion. This time, I brought up the issue of radioactive waste. Everyone knows where it comes from. However, the question is how and where to bury it. I asked Aleksandr Grebenkov, head of the laboratory of the Institute of Energy Problems at the Belarusian Academy of Sciences, to share his opinion on this issue.

Grebenkov: Indeed, the problem of radioactive waste remains one of the most difficult and expensive issues. It first arose during the development and creation of the first atomic bomb. In the United States, all wastes, chemicals, and even clothes were mixed with concrete in a special laboratory, loaded in containers and dumped in the Massachusetts Bay near Boston.

In the Soviet Union, the attitude was just as neglectful. Radioactive wastes were often discarded at unequipped and unguarded dump sites. However, as far as I know, there were no such sites in our Republic before the Chernobyl catastrophe.

Rostikov: And what about the burial ground in Minsk?

Grebenkov: That's a different matter. The burial place in Sosny, established specifically for this purpose, is a sophisticated engineering facility equipped with several protective barriers. It has been operating for several decades now without any problems. The problem is, however, that it is no longer large enough. The situation became especially difficult after the Chernobyl accident. At first, we shipped

all Chernobyl-related waste to the scientific and industrial amalgamation "Prypyat" in Ukraine. Now that our republics have become independent states, Ukraine refuses to accept "foreign" radioactive waste. This is why we found ourselves confronted with a need to set up our own dump sites—because you cannot consider as dump sites the dustheaps scattered all over Homel and Mohylev Oblasts, where bulldozers dig radioactive litter into holes covered at best with polyethylene. After some time, those holes sag and accumulate water, which can easily penetrate into the ground waters. Over the past two years, the State Chernobyl Committee has conducted inventories of those sites to determine how dangerous they are.

Rostikov: But it was the Committee that once sanctioned those burial sites.

Grebenkov: This was all we could do at that time. Some villages needed to be buried. The fires last year showed how dangerous the secondary transfer of radiation is. Add to this marauding... Also the problem of burying ashes from burning radioactive wood and peat, where the concentration of radioactive substances is 50 times of that in wood, is acute. Silt is another source of radioactivity. No one knows so far what to do with it. Water is evaporating, increasing the risk of secondary transfer of radiation.

Rostikov: Where do you plan to locate stationary burial sites?

Grebenkov: In several places. One of them is in Homel Oblast, near Khatki. They would comply with all international standards.

Rostikov: What do you know about the construction of the burial site at the "Marlinskiye Hamlets" military firing ground near Stolin? Local residents claim that this will be where not only local waste will be buried but also waste from atomic stations and CIS and Western nuclear submarines.

Grebenkov: This area was heavily contaminated in the Chernobyl accident. Since intensive clean-up measures are being conducted there at this time, one has to do something with the collected radioactive dirt. This burial site will efficiently block the spread of radiation throughout the Republic. However, this site will, so to say, serve local needs—there could be no talk about any waste from other regions, let alone from other countries.

ESTONIA

Nuclear Fuel Removal From Paldiski No Later Than April

WS0501143394 Tallinn BNS in English 1013 GMT 5 Jan 93

[Text] Tallinn, Jan 5, BNS - Russia will probably start the removal of nuclear fuel from Paldiski in March or April, Environment Minister Andres Tarand told BNS. The process will take about four months, he said.

Tarand's statement was based on Foreign Ministry Adviser Mark Sinisoo's claim that Russia proposed June 30 as the deadline for taking out the fuel. The minister told BNS this is "a case typical of the situation in Estonia where a department does not coordinate its activity with others."

In Tarand's opinion, the Transportation and Communications Ministry and the Rescue Service should certainly take part in the dismantling of the reactors.

Kalev Timberg, the deputy director of the Rescue Service, told BNS the service is to secure fire safety during the process and deactivation of radioactive substances if an accident occurs. Russia hasn't yet submitted to the Rescue Service the dismantling blueprints, which complicates the situation, he said.

Timberg refused to comment reports that Russian military authorities want the Rescue Service to bring to the scene equipment able to shoot jets of water to a height of at least 12 meters.

Henno Putnik, the chief specialist of the Estonian Meteorology and Hydrology Institute's radiation laboratory, told BNS removal of nuclear fuel rods from reactors "is an operation Russian submariners often carry out."

The dismantling of the entire nuclear reactor complex in Paldiski is to take place in the second stage of the operation.

Tarand told BNS Finnish and Swedish specialists have offered to help Estonia in this.

LITHUANIA

Government Resolution Approves Nuclear Fuel Waste Storage

WS2712115693 Vilnius TIESA in Lithuanian 8 Dec 93 No. 238 p 9

[Government Resolution No. 890 "On the Nuclear Fuel Waste Storehouse at Ignalina State Nuclear Power Plant" issued on 30 November 1993 in Vilnius]

[Text] Considering the fact that nuclear fuel waste storehouses at the Ignalina state nuclear power plant are nearly filled to capacity, and that there is no possibility for exporting this fuel for recycling or for burying it, the Government of the Republic of Lithuania decrees:

- 1. To approve of the proposal by the Energy Ministry to install a storehouse on the premises of the Ignalina state nuclear power plant for the temporary storage of nuclear fuel waste.
- 2. To authorize V. Shevaldin, director of the Ignalina state nuclear power plant, to:
- 2.1. sign an agreement with the German firm "GNB" on the production of 30-60 containers for the storage of nuclear fuel waste, and the development of their loading technologies;
- 2.2. draft a project of the storage grounds for containers and coordinate it with the State Atomic Energy Inspection, the Department of Environmental Protection, and the Ministry of Health;

- 2.3. draft an agreement with the state enterprise "Lithuanian Railways" on the facilities necessary to transport the containers.
- 3. The Energy Ministry shall resolve organizational issues concerning the conclusion of the agreement with the German firm "GNB" and its financing in cooperation with the Ministries of Finance and Economy.

[Signed] Prime Minister Adolfas Slezevicius

Energy Minister Algimantas Stasiukynas

[Dated] 30 November 1993, Vilnius.

MOLDOVA

Smugglers Caught With 1.7 KG of Uranium

AU2312132493 Paris AFP in English 1242 GMT 23 Dec 93

[Text] Chisinau, Dec 23 (AFP)—Five Moldovans were arrested as they attempted to enter Romania carrying 1.7 kilogrammes of pure uranium and two kilogrammes of red mercury to be sold on the black market, customs officials said here Thursday.

The uranium and mercury, originating in Russia, were seized by Romanian customs officials as the Moldovans crossed the land frontier at Leuseni, and were to be sold on to one or several unknown customers, they said.

Ukrainian authorities and Black Sea security forces on Wednesday arrested six people involved in a plot to smuggle out 300 grammes of a "highly radioactive material" worth one million dollars, according to Ukrainian radio monitored by the BBC in London.

The report did not say where the arrests were made, what kind of radioactive material was involved, or where it was bound.

More than 20 kilogrammes (44 pounds) of red mercury and 20 containers of cesium have been intercepted this year at the frontier between the former Soviet republic of Moldova and the culturally similar republic of Romania, where border controls for nationals of the two countries have in principle been simplified.

Since the collapse of the Soviet Union in December 1991, smugglers carrying nuclear materials from Russia and other former Soviet republics have been arrested in several central and eastern European countries.

UKRAINE

Official Says Nuclear Weapons Storage Unstable LD1801225894 Kiev Radio Ukraine World Service in Ukrainian 1900 GMT 18 Jan 94

[Text] Nuclear weapons, whose shelf life is reaching its upper limit, can now pose a threat to Ukraine. Kostyantyn Hryshchenko, head of the directorate of control over armaments and disarmament of Ukraine's Ministry of Foreign Affairs, stressed this during a meeting with journalists on 18 January. He emphasized that all components necessary for the safe storage of nuclear weapons, hydrogen absorbers

in particular, are manufactured in Russia and until recently were not being supplied to Ukraine. Hryshchenko noted that this led to the storage of nuclear weapons becoming increasingly unstable. The threat was gradually increasing and demanded a resolution. In the opinion of the representative from the Ministry of Foreign Affairs, after Ukraine's experience with Chernobyl it would be extremely irresponsible not to take this situation into account.

Country Dismantles 17 Warheads, but Questions Remain

MK2212101093 Moscow SEGODNYA in Russian 22 Dec 93 p 1

[Pavel Felgengauer report in the "Disarmament" column: "Ukraine Has Gone Ahead With Abolishing Its Nuclear Potential. Has Russian and U.S. Pressure Yielded Results?"]

[Text] Recently Ukraine has speeded up the dismantling of the nuclear missile potential it has inherited. On 20 December Valeriy Shmarov, Ukrainian vice premier in charge of the military industrial complex, announced that 17 nuclear SS-24 missiles (in all there are 46 SS-24's in Ukraine) have been taken off alert. Combat nuclear units (more than 100) have been taken down from missiles, yet they still remain in silos. Before the end of the year Ukraine has promised to dismantle warheads from yet another three SS-24 missiles. And in 1994, according to Valeriy Shmarov, the remaining SS-24 missiles located on Ukraine's territory are to be taken off alert status. This, in spite of the fact that back on 11 August Grishchenko, head of the Ukrainian Foreign Affairs Ministry's Arms Control and Disarmament Department, announced that, in Kiev's opinion, the Ukrainian SS-24's do not come under the START I Treaty and therefore may legally be kept.

The Russian Defense Ministry confirmed that 17 warheads have indeed been taken down from SS-24 missiles. In addition, according to the Russian Defense Ministry, nuclear units have been dismantled from 41 Ukrainian SS-19 missiles (more than 200 units) while part of the SS-19 missiles have already been taken out of their silos for subsequent destruction. Therefore approximately one-third of the Ukrainian nuclear missile capability has been taken off alert. Clearly the joint Russian-U.S. diplomatic and economic pressure has finally resulted in appreciable shifts in Kiev's position. A U.S. State Department spokesman in Washington welcomed Ukraine's latest moves as "a step in the right direction."

True, full elimination of all nuclear missile disagreements between Moscow and Kiev is still a long way off. Valeriy Shmarov said that Russian specialists continue to service the nuclear charges located on Ukraine's territory, and described the Russian Government statement that such servicing has been stopped as "populist and uncalled for." Nonetheless, Colonel General Yevgeniy Maslin, chief of the 12th Main Directorate of the Russian Defense Ministry (earlier a highly classified branch of the Soviet Army whose specialists deal with all matters of storage, use, and transportation of nuclear units and are generally responsible for all nuclear charges adopted for service), assured

SEGODNYA's correspondent that "there are no Russian military servicemen from the 12th Directorate in Ukraine." However, the 43rd Missile Army deployed in Ukraine includes former specialists of the 12th Main Directorate who have "stayed" in Ukraine together with the army and sworn the Ukrainian military oath, and can not now be considered Russian servicemen.

Furthermore, only three defective SS-24 missile warheads have been delivered to Russian territory and transferred to specialists of the Atomic Energy Ministry (former Sredmash). The other decomissioned missile nuclear units are so far in Ukraine. As before, the 43rd Army's combat unit storage facilities remain overloaded in excess of all norms (six to eight times, according to the 12th Main Directorate).

The question about the form and size of compensation to Ukraine for nuclear disarmament also remains open.

Top Military Leaders Say Nuclear Facilities Safe AU2212121793 Kiev URYADOVYY KURYER in Ukrainian 21 Dec 93 p 3

[Report by the Press Service of Ukraine's Ministry of Defense: "Ukraine's Nuclear Facilities"]

[Text] Some foreign mass media continue carrying information on the critical state of nuclear facilities located on the territory of Ukraine. They make particularly frequent references to "Russian experts," officials of the Russian Ministry of Defense, and some Russian politicians.

Ukraine's minister of defense made a tour of units and facilities of strategic rocket troops deployed on the territory of Ukraine and visited temporary storage facilities for nuclear warheads detached from those missiles that have been taken off combat duty for an objective evaluation of their condition.

During the trip, Ukraine's Army General Vitaliy Radetskyy and officials in charge of the condition of nuclear weapons made statements for the press.

Lieutenant General Volodymyr Mykhtyuk, commander of the 43d Rocket Army of Strategic Rocket Troops:

"Problems involving maintenance do exist. This is perfectly understandable. However, there is no need to lay it on thick. The situation at nuclear facilities is fully under control. We have all the necessary means for this. Any attempts at drawing parallels with Chernobyl or something similar are absolutely groundless."

Lieutenant General Valeriy Vasylyev, commander of the Ukrainian Air Force:

"The strategic aviation within the Ukrainian Air Force is equipped with nuclear munitions. They are presently reliably stored. Even though our aviators also have numerous problems, there cannot even be talk about a critical situation. Such assertions do not correspond to reality."

Army General Vitaliy Radetskyy, Ukraine's minister of defense:

"On the instructions of the president and in accordance with a special program, we, together with military specialists and scientists, visited all the facilities where nuclear weapons are stored. Our main task was to obtain objective information on the operational status of nuclear warheads and assess the quality of their maintenance and storage. We particularly wanted to find out what additional measures need to be taken locally with regard to such important issues as the security and defense of the facilities and protection from fire and detonation."

"Of course, we have enough problems. Particularly so on the eve of negotiations on these issues with the Russian side. In the very near future, we plan a meeting with the Russian Federation's defense minister [Pavel Grachev]. A whole package of documents have been elaborated and will be discussed. It is important that both we and Russia show a willingness to constructively resolve all problems that are emerging."

"Therefore, one should not overdramatize the situation, as some journalists and politicians have done. The situation at the missile facilities is satisfactory. We are taking additional measures to reinforce security, maintain normal conditions for storing nuclear warheads, and provide units and subunits of strategic troops with everything necessary."

Attempt To Smuggle Radioactive Material Thwarted LD2312031693 Kiev Radio Ukraine World Service in English 2200 GMT 22 Dec 93

[Text] As the Ukrainian Interior Ministry's public relations center disclosed on Wednesday, officers of the Black Sea regional internal affairs agency and the Odessa (?Bergut) elite anti-terronst formation squad thwarted an attempt to smuggle a container with 300 grams of potent alpha, gamma, and beta radiation emitters in 60 sealed glass ampoules, which the smugglers intended to sell for \$1.02 million. The detainees include the manager of the [word indistinct] research and production association, a broker with the [word indistinct] firm, and four persons without definite employment. In addition to the above radioactive material, several firearms, 100 kilos of mercury, and a lot of document forms were confiscated in the raid. A similar raid is reported to have been carried out in Chisinau, neighboring Moldova's capital, which also yielded a container with 1.5 kilos of radioactive material. A joint search is reported underway for the (?hazardous) materials shipper.

Physicist Predicts Chernobyl Explosion To 'Destroy Mankind'

WS2812155693 Kiev VECHIRNIY KYYIV in Ukrainian 18 Dec 93 p 1

[Letter by physicist Yuriy Shvaydok, edited by Yana Moyseyenkova: "Warning Against Catastrophe Is Not Groundless"—first paragraph is VECHIRNIY KYYIV introduction]

[Text] On 11 December 1993, VECHIRNIY KYYIV published a letter by physicist Anatoliy Kovalevskyy under the headline "Is the Explosion of the Containment Bunker

Inevitable?" Kovalevskyy warned against a possible explosion at the Chernobyl nuclear power plant from the accumulation of a critical mass of plutonium and uranium in certain parts of the reactor. This frightening theory has its peculiarities, because the scientist based his calculations on his own research, still not acknowledged by official scientific circles. This is why Kovalevskyy's attempts to draw attention to his theory were ignored. However, if there is even the slightest chance that a new accident might occur, the hypothesis should be thoroughly examined, the more so since the author of the letter refers to analogous research by Japanese scientists. VECHIRNIY KYYIV sees its goal as receiving a clear and grounded response from representatives of the official scientific community. Today, we are publishing the first response, provided by physicist Yuriy Shvaydok, manager of the International Institute [as published].

Shvaydok: According to our calculations, there should have been another explosion at the Chernobyl plant in May 1989. I made the calculations along with Candidate of Technical Sciences M. Koponenko and radiologist V. Savin. A reaction indeed, was launched then; fuel caught fire and the temperature increased. However, the concrete plate cooled with liquefied nitrogen cracked because of a difference in temperatures and the accumulation of a critical mass was postponed.

All the arguments furnished by A. Kovalevskyy are correct. He claims that the accumulation of uranium and plutonium presents a danger. This is correct, but the critical mass of plutonium is 14 kilograms and it may take a long time for the process to complete. However, the threat presented by americium is much more real. One should keep in mind that a huge plate is hanging on pieces of wire and pipes inside the containment bunker. Its fall would inevitably result in a gigantic dust cloud. We cannot rule out that this might bring the mass of americium-242 to a critical level. Americium is the material used to build neutron bombs.

It takes 16 hours for americium-241 to transform into americium-242, while its critical mass is just a couple of grams. Taking into account the data on accumulation, periods of disintegration, and complete decomposition, I have come to the conclusion that the final explosion at the Chernobyl plant will take place on 22 May 1999.

What will be the consequences? The one-kilogram bomb used on Hiroshima claimed 100,000 lives. The Chernobyl explosion could destroy mankind by initiating a "chain reaction of reactors," both in Ukraine and abroad, including nuclear warheads.

What should be done with the reactor? There was a suggestion to apply the "green meadow" method. To the best of my knowledge, there is no way to use this method in Chernobyl. The idea is a bluff. I think that preference should be given to so-called "membrane technologies." Basically, they call for the use of flat membranes to equalize the concentration of matter in a solution. By using this method, we can interrupt the process of building up a critical mass. Following this, we may begin the decontamination of the Chernobyl facility.

Defense Ministry Declines To Comment on SS-24 Deactivation

AU2312124393 Kiev HOLOS UKRAYINY in Ukrainian 22 Dec 93 p 1

[Unattributed report: "A Serious Step"]

[Text] An extensive range of issues associated with the ratification of START-1 and the reservations that are listed in the Ukrainian Parliament's decree on this problem were discussed in Kiev last week. The delegations of the United States headed by S. Talbott, ambassador-at-large and special adviser to the secretary on the newly independent states, and of Russia headed by Deputy Minister of Foreign Affairs G. Mamedov took part in the negotiations. The Ukrainian delegation was headed by Vice Prime Minister V. Shmarov.

As reported by the Ukrainian Presidential and Cabinet of Ministers Press Service, the sides agreed that questions of Ukraine's security should be jointly resolved with Russia and the United States on questions of the elimination of missiles. As reported by the UNIAN press agency, V. Shmarov said that particularly good understanding was reached with regard to compensation for both tactical nuclear weapons transferred to Russia and strategic missiles. The vice prime minister also stated that Ukraine had already taken 17 of the most up-to-date SS-24 missiles off combat alert. V. Shmarov considers this to be a serious step attesting to the fact that our state is striving to pursue a nuclear-free policy.

The Press Center of Ukraine's Ministry of Defense has not confirmed V. Shmarov's information that the deactivating the SS-24 missiles has begun. The UNIAN correspondent was told that the Ministry of Defense is not authorized to comment upon such statements.

Greater Yalta Proclaimed 'Nuclear-Free Zone'
AU2912131493 Kiev HOLOS UKRAYINY in Ukrainian
25 Dec 93 p 1

[Unattributed report: "Greater Yalta Has Been Proclaimed a Nuclear-Free Zone"]

[Text] The 20th session of the Yalta Town Council adopted a statement "On Proclaiming the Territory of Greater Yalta a Nuclear-Free Zone." The Yalta Town Council takes upon itself an obligation not to allow the installation, deployment, maintenance, or storage of nuclear weapons or other radioactive materials on its territory. The transit or transportation of nuclear components, including the arrival of ships with nuclear weapons on board to the port, is forbidden. It was decided to establish efficient control over adherence to the nuclear-free status. The statement was sent to Ukraine's Supreme Council, to the Crimean Supreme Council, and to the committee of the International Secretariat "The Movement of Local Authorities in Nuclear-Free Zones" (Manchester, Great Britain). The deputies turned to local organs of power of the Black Sea Region with a proposal to support their statement.

Kravchuk Edict Issued on Safeguarding of Nuclear Material

LD2912221493 Kiev Radio Ukraine World Service in Ukrainian 2000 GMT 29 Dec 93

[Text] On 29 December two edicts were issued by the president of Ukraine concerning our general internal problems. The first one is on measures of physical protection of nuclear material and nuclear installations in Ukraine:

With the aim of preventing illegal actions in relation to nuclear materials and nuclear installations which are used for peaceful purposes and with the aim of establishing legal principles of their physical protection, I hereby decree:

To establish, until the law of Ukraine on the use of nuclear energy is adopted, that in the sphere of physical protection of nuclear material and nuclear installations the Security Service of Ukraine and the Ministry of Internal Affairs of Ukraine will assess the state of affairs with the preservation of nuclear material, prevent criminal actions against nuclear material and nuclear installations, give recommendations as to the level of their physical protection, supervise the observance of these recommendations, and search for and retrieve nuclear material if lost.

The State Committee of Ukraine for Nuclear and Radiation Safety, in compliance with the recommendations of the International Atomic Energy Agency and also the recommendations of the Security Service of Ukraine and the Ministry of Internal Affairs of Ukraine, as issued under Paragraph 2 of this article, will approve the norms and rules concerning physical protection of nuclear material and nuclear installations and will supervise their observance and the state of physical protection.

The State Committee of Ukraine for the Use of Nuclear Energy and authorized bodies which carry out the construction and operation of nuclear installations and which are responsible for storage or use of nuclear material, will preserve or transport nuclear material and ensure the physical protection of nuclear material and nuclear installations in compliance with the approved norms and rules and maintain it at the required standard.

The State Committee of Ukraine for Nuclear and Radiation Safety is charged, in compliance with Article 5 of the 1980 convention on physical protection of nuclear material, with conducting Ukraine's international relations on issues of physical protection of nuclear material.

The Cabinet of Ministers of Ukraine will take urgent measures so that nuclear material is preserved by all enterprises and organizations which use, store, and transport it, and will establishe personal responsibility for its safety and for the registration of persons who carry out work in places where such material is stored and used.

Regulations for arranging and ensuring physical protection of nuclear material and nuclear installations will be approved within three months.

The expediency of setting up an interdepartmental center for regulating physical protection of nuclear material and nuclear installations in Ukraine will be considered.

Ukraine President Leonid Kravchuk.

Regiments Servicing SS-12 Missiles To Be 'Deactivated'

LD3012051393 Moscow Mayak Radio Network in Russian 0400 GMT 30 Dec 93

[Text] Kiev is now studying the possibility of Ukraine joining the Council of Defense Ministers of the Commonwealth countries. This was learned from Ivan Bizhan, Ukraine's deputy defense minister.

As far as the nuclear disarmament problem is concerned, the deputy defense minister said that before the end of the year two regiments servicing and maintaining SS-12 missiles would be deactivated.

This report was supplied by the IMAPRESS agency.

Association Professes National Expansion, Nuclear Status

AU3012194093 Kiev NESKORENA NATSIYA in Ukrainian No. 19 (42), Dec 93 p 4

[Statement by the All-Ukrainian Political Association "Ukrainian State Independence" (DSU): "The Political Philosophy of the DSU"—capitalization as published]

[Text] The ideology of the DSU is not restricted to the interests of a social or party group, stratum, or class, but expresses the interests of the nation. The political ideology of the DSU is natiocratic [natsiokratychna]. The association strives to build a natiocratic state in which the UKRAINIAN NATION will be the source of power.

Nation is the main concept in the DSU's political philosophy. The rights and interests of the nation are the main criteria of our actions. The government is legitimate when it is guided by the interests of the Ukrainian nation.

The task of the state is to serve the nation and to be a powerful instrument in its political and spiritual self-assertion and in its historic activity. The power of the Ukrainian nation will also guarantee the rights of every member of this great entity.

When we say "nation" we mean an "ethnos," which controls itself and ethnic minorities. For us, the notions "nation" and "state" are inseparable.

The WILL, POWER, and GRANDEUR of the NATION is the triad of our political philosophy. The national will primarily expresses internal aspirations of the ethnos, which has acquired its statehood. The category "power of the nation" has both internal and external political dimensions. Control over itself is not the ultimate goal of a nation. A nation strives to expand its influence and its power imperatives beyond its own territory. A full-fledged national idea cannot remain confined to the boundaries of its own state and it expands beyond internal national problems. It is characterized by messianic aspirations. A nation strives to make its own values and its own understanding of the world a legacy of other nations in order to sow its seed on the soil of other states.

Every developed nation strives to create a civilization and include other nations into the sphere of its influence and into its sociocultural sphere.

A great nation is a nation that has achieved success in all spheres of self-expression, played all the roles meant for it by BIRTH [Rid], and is capable of teaching the world and influencing the course of history. Such a nation is ideal and such a nation is majestic [mayestatychna]!

We do not conceal our desire to witness Ukraine's world grandeur. Yes, we want Ukraine to become a political, economic, and cultural superpower.

Political power is created by military force. In order to become a weighty political factor in history and in order to renounce the pernicious principle of neutrality, Ukraine must become a military and powerful state.

A country that does not want to be pushed to the background and that strives to influence historical processes, must be a nuclear power. That is why, despite the unprecedented pressure exerted upon us by the United States and Russia, Ukraine must keep its nuclear weapons.

The 21st century will become an epoch of natiocratic revolutions. The Western civilization, which is based upon liberal democratic (but, in fact, transformed Judaic) values, has exhausted its creative potential. The Russian civilization is also moving toward a catastrophe. The natiocratic ideas of Mykola Mikhnovskyy, Dmytro Dontsov, Mykola Stsiborskyy, and Stepan Bandera are victoriously spreading. The sun of the 21st century that rises over Ukraine will herald the advent of a total natiocratic renaissance to the world.

Attempt To Smuggle Out Radioactive Materials Thwarted

PM0501095994 Moscow Ostankino Television First Channel Network in Russian 1800 GMT 25 Dec 93

[From the "Novosti" newscast: Video report by Yuriy Selivanov and Boris Zamchinskiy, identified by caption]

[Text] [Announcer to camera] An operation to thwart the smuggling out of a large batch of radioactive materials which, according to the investigative bodies, could be used to produce nuclear weapons, has been carried out by subunits of the Ukrainian Ministry of Internal Affairs together with Interpol.

[Selivanov over video of said operation captioned "13.12.1993, Ukraine"] A criminal gang specializing in the export of enriched uranium produced at CIS countries' nuclear industry facilities was detained during the operation. A total of 240 capsules containing 1.5 kg of radioactive material were confiscated.

Of late law-enforcement bodies are increasingly coming up against criminal activities with a clearly pronounced nuclear bias. The impression is that the protection of enterprises producing nuclear components leaves much to be desired.

Lowering of the nuclear safety standards is fraught with the most serious consequences in our time. The attempt to smuggle out radioactive material which was foiled in Odessa is another reminder of the urgent need to adopt prompt interstate measures in this area. [video shows footage of operation, confiscated capsules]

Nuclear Weapons in 'Very Serious' State PM0501142194 Moscow KRASNAYA ZVEZDA in Russian 5 Jan 94 pp 1-2

[Interview with S.N. Voronin, chief nuclear and thermonuclear weapons designer, under the "Interlocutor of the Day" rubric by Mikhail Rebrov; date, place not given: "Atomic Bombs Are Not for Use in Political Games"—first four paragraphs are introduction]

[Text]

Calling Card

Stanislav Nikolayevich Voronin was born into a workingclass family in 1930 in the city of Yaroslavl. After graduating from school he went to the Leningrad Ship-Building Institute. He began working at the All-Union Experimental Physics Scientific Research Institute (Arzamas-16) in 1954 as an engineer-designer and was involved in developing and testing nuclear munitions for several generations of landsea-, and air-launched missiles. He has won Lenin and State Prizes. In 1969 he became a deputy chief designer.

Since 1991 he has been a chief nuclear and thermonuclear weapons designer.

He is married with two children.

Rebrov: Stanislav Nikolayevich, everyone is hearing about the future of Ukraine's nuclear weapons today. There are very different opinions on this. INTERFAX reports that [Ukrainian] President Kravchuk recently said that "given the complex economic situation Ukraine regards nuclear weapons not as weapons but as a material asset." What comment can you make on this statement?

Voronin: Some of the chief designers of nuclear weapons and munitions—prominent scientists Yu.B. Khariton, Ye.N. Avrorin, Yu.A. Trutnev, and R.I. Ilkayev; directors of Russia's Arzamas-16 and Chelyabinsk-70 federal nuclear centers V.A. Belugin and V.Z. Nechay; and Ministry of Atomic Energy specialists have sent a letter to the citizens and governments of Ukraine, Russia, and other countries exposing all the truckery over the nuclear weapons and over the question of whether they are weapons or commodities....

Rebrov: You recently visited Ukraine, Pervomaysk among other places. What is going on there?

Voronin: An inspection of the state of the nuclear weapons in this and other areas revealed a number of major irregularities in the handling of the nuclear munitions. Not only as far as their storage is concerned, but also in terms of maintenance. What is being done there constitutes a flagrant breach of the most basic regulations and norms for handling nuclear weapons. You want me to be more specific? OK. Some of the warheads have been taken off alert status and cannot be put back. That's impossible. Warranty periods [garantiynyye sroki] have expired, there are no spare parts, and the servicing procedures envisaged

by operating instructions are not being carried out. This work must be carried out without fail at least once every three years. The munitions have been stored in a temporary storage facility, that is in places where they should only be kept during the servicing procedures. This storage facility is jam-packed at the moment. There is no proper access to the weapons, nor are there places for technical servicing, and consequently there is none of the proper supervision. This is all very serious.

Rebrov: It has been reported that a rise in temperature has been recorded at these storage facilities....

Voronin: Yes, of 1.5-2 degrees. That is understandable. Every munition emits heat; plutonium is, after all, always hot—this is not critical. It is something else that is frightening: There are lots of weapons in the store, the radiation background is rising, and the time that technical personnel spend there has to be restricted....

It is always dangerous to stockpile nuclear munitions. And if there are flagrant breaches of technical maintenance requirements to boot, it is doubly dangerous. Fire, explosion.... This is plutonium, after all. A highly dangerous material. I won't tell you what could happen if it touches the ground. It has a half-life of 24,000 years....

Rebrov: And how long have these munitions been there without technical servicing?

Voronin: Five years.... The articles contain moisture absorbers and bulk fillers [poglotiteli vlagi i obyema]. They also require periodic checks. A change in the oxygen content of the environment can cause the important uranium components to oxidize. These processes occur tens of times more intensively than in air.... And there is also the formation of fine dust. It can spontaneously ignite. What is more, the hydrogen content is rising in the hermetic container. It may approach critical level. And an explosive mixture spells the danger of detonation. The increased concentration of hydrogen also has an adverse effect on electronic instruments.

Rebrov: It is not only at Pervomaysk that this alarming, if not dangerous, situation has arisen....

Voronin: Regrettably, no. A similar feckless attitude is being manifested toward cruise missiles and other munitions. The recurrent irregularities are becoming frightening. Just think: Missile complexes fitted with nuclear munitions are not carrying out the repair and inspection work for which documentation makes provision.

And what about failure to comply with transportation regulations! We asked for two weapons to be sent to us for control disassembly [kontrolnaya razborka]. The talks were difficult, but it did nonetheless prove possible to persuade them of the—let me stress—urgent advisability of doing this. We are still waiting. The weapons have still not turned up. It now turns out that they are held up at customs and have spent two weeks in a siding somewhere without any supervision and guard.

In a word, these violations—and the list goes on and on—are causing slipups, increasing the danger in handling

nuclear munitions, and may cause accidents whose consequences and scale will be comparable to or even exceed the disaster at Chernobyl.

And this is a disaster not only for Ukraine and Russia. All neighboring states and those states in Europe and the Near East which, owing to various meteorological phenomena, may find themselves in the zone of radioactive contamination need to ponder this.

Rebrov: Stanislav Nikolayevich, is Ukraine able in jour opinion to cope autonomously with such an alarming situation and such a complex problem?

Voronin: What do you mean by "cope with?" The rigorous system for maintaining and ensuring the security of nuclear weapons that operated for many years in the former USSR and is still functioning in Russia has been destroyed in Ukraine and is not operational. I say this in all responsibility as a chief designer.

I do not want to go into the reasons, I do not want to conduct a political debate; I am only talking facts. And the facts are that the prevailing situation is being aggravated by the fact that the nuclear munitions on Ukraine's territory lack physical protection and guard in keeping with present-day requirements.

Rebrov: What about disassembly? The Ukrainian leadership is relying on Western aid....

Voronin: Let me tell you this: Atomic bombs are not for use in political games! Some politicians are indeed saying that nuclear munitions can be dismantled in Ukraine. This is an ill-intentioned attempt to mislead the public. Ukraine has neither the specialists with the requisite qualifications nor the production units nor the experience of disassembling weapons. Incidentally, handling munitions whose warranty periods have expired and which have been kept in extremely dubious conditions is a highly dangerous job.

I would like to believe that we will reach a sensible solution once we have cast aside all political ambition and speculation. In exchange for the warheads Ukraine will receive fuel elements for its nuclear electric power stations. But who will pay the "Russian workers" for their hypercomplex and dangerous work? Have you asked yourself that?

It is thoughtless to count on foreign specialists. No sensible professional, if he is a responsible inhabitant of the planet, would undertake to dismantle a nuclear munition developed in another country, using unknown technology.

Rebrov: What is the situation today? Has there at least been some progress—the problem has, as you said, gone beyond Ukraine and Russia?

Voronin: There is no particular optimism. However, nor is there particular reason not to be optimistic. The warheads must be removed immediately. We have proposed a schedule. And that is not so easy either. The transport and the plants where the disassembly will be carried out must not be overloaded. Time is moving on. Haggling is inappropriate in such a dangerous situation. There has so far been no reaction from Ukraine.

Rebrov: Stanislav Nikolayevich, there have been various adjustments and amendments to the agreements that have been reached.... What is behind them?

Voronin: All that is irresponsible bluff. That is why scientists and designers from two Russian nuclear centers have provided the peoples and governments of all the world's countries with an analysis of the situation and urged them to do everything they can to avert a potential catastrophe.

Rebrov: When we met with you in Arzamas-16 in October you spoke about the problem of the safety of the nuclear weapons, and now we have this situation....

Voronin: I said and I can repeat that we have not been marking time while working on developing nuclear munitions. Year in, year out the level of security has risen. We have succeeded in developing new detonators that do not explode in the event of fire or when struck and do not operate even if you crush them. In other words, we have succeeded in making detonators less sensitive to heat and mechanical factors than the explosives used in the weapons.

The configuration and design of these munitions are devised in such a way as to ensure that no nuclear explosion occurs in the event of any catastrophe or accident. But what I am saying does not apply to the munitions now in Ukraine.

Rebrov: You said that "you have not been marking time." What about now?

Voronin: Do you mean: What are we doing now? Have we come to a standstill? Have I gotten your drift? Allow me to ask you this: Has the world already become nuclear-free, and have all states with nuclear weapons stopped producing and improving them? No! Then why should Russia act differently? Isn't our security guaranteed by the might of the country's defense potential? I think that I have answered your question.

Rebrov: In that case are tests necessary?

Voronin: They are. Can you develop new weapons and not test them? I would like to talk about guarantees of the safety of such tests. We have developed a technology for underground explosions whereby no emissions occur. This is a tricky problem, but it has been resolved. And I think that information about it should not be kept secret but brought to the notice of the public, to everyone who talks about tests without knowing or understanding the crux of the matter. Regrettably, the inspections that have been carried out at test facilities—not long ago but recently—have not acted as an argument; nobody reads these reports. Hence the tendency to blame atomic specialists for everything.

Moreover, if we are talking about tests, you have to take a far broader view and not just confine yourself to weapons. Talk to our scientists and, in particular, to Academicians Khariton and Trutnev. Both Yuliy Borisovich and Yuriy Alekseyevich will give you a detailed insight into the problems of physical science. It is not "marking time" either, today physics is tackling the kind of processes that cannot be reproduced under laboratory conditions. Imagine, pressure of billions of atmospheres, temperatures

of tens and even hundreds of millions of degrees, velocity measured in 100-millionths of a second.... Not to mention fantastic densities, the purity of the substances obtained, etc. No science can develop without experiment....

Rebrov: Blowing up munitions that have been uncontrolled in terms of technical servicing, observance of storage norms, etc is probably of interest to nuclear designers?

Voronin: Indisputably. That is why I would like to stress that we should not tilt at windmills but confront the real danger. It does exist, and its source is well-known.

Rebrov: One last thing, Stanislav Nikolayevich, KRAS-NAYA ZVEZDA has frequently written about the social tension at Arzamas-16. Has there been any change?

Voronin: We are grateful for the support, the newspaper's article played a positive role, and there has been kind of progress, but.... Regrettably everything has been held up. And I do not rule out the possibility of another social explosion.

Nuclear Control Said 'Technically Possible' AU1001120094 Kiev MOLOD UKRAYINY in Ukrainian 6 Jan 94 pp 1, 3

[Article by Anatoliy Martsynovskyy: "Missiles on Target. Ukrainian Nuclear Weapons Are Among the Main Objectives in Moscow's Offensive External Policy"—first paragraph published in boldface]

[Text] It would be naive to believe that our missiles constitute a military threat for Russia. These missiles are under the operational control of Russia's Strategic Missile Troops headquarters; they are serviced by Russian specialists along-side Ukrainian ones; our military doctrine does not envisage first nuclear strike, and so forth. Notwithstanding this, Russia seeks Ukraine's nuclear disarmament as soon as possible and the "missiles issue" remains a stumbling-block in relations between Ukraine and Russia.

Moscow is developing vigorous activity. Taking advantage of its prestige (more specifically, our lack of prestige) in the world, it does everything it can to continue playing the role of a big brother who holds the younger brother's hand and keeps pointing at him: "A naughty boy!" This negative image of Ukraine, the image of a minor nuclear aggressor is also steadily being created by the Russian mass media, which are readily quoted by the West. The world community is being encouraged to put pressure upon Ukraine. An appeal was recently issued by Russian designers, scientists, and specialists of the Atomic Energy Ministry [Minatom] to citizens and governments of world states, in which the Russians intimidated those governments with the dangerous state of Ukrainian nuclear warheads. All the numerous statements by high-ranking Ukrainian politicians and military figures on the groundlessness of such assertions do not produce any special effect and constitute, figuratively speaking, whispers against a background of Russian loudspeakers.

Russia's official argument in this political struggle is the dangerous state of our missiles. Having pointed out that

our politicians (people's deputy Serhiy Semenets, cochairman of the group for studying aspects of ratifying START-1: "Emergency Situations Are Impossible") and military figures (Minister of Defense Vitaliy Radetskyy: "The State of Missile Facilities Is Satisfactory") have a different opinion, we will proceed to some other, more spontaneous, methods resorted to by Moscow for attaining Ukraine's nuclear disarmament.

If Ukraine gets rid of its missiles, Russia will become the only nuclear power in the region of Central and Eastern Europe. This will also give it the traditional and desired possibility to be at the top. The Russian desire to be in control is more than obvious: For example, Russia's nervous reaction to plans by Poland, Hungary, and Czechia to join NATO was very revealing. If such plans are implemented, the alignment of forces promoted in the region will not be in Russia's best interests. At a recent (1 December 1993) CSCE conference in Rome, Russia demanded that the mandate of a peacekeeper in CIS countries be given to it—not a single country supported that initiative. Fortunately for us, because that mandate, alongside statements by Russian politicians, in particular, Minister of Foreign Affairs Andrey Kozyrev ("Russia must actively defend the rights of the Russian-speaking population, using rapiddeployment forces for the purpose"), would give our neighbors an opportunity for large-scale activities, since (again, from Moscow's point of view) that "Russian-speaking population" is abused in almost every former Union republic. Thus, Russia is clearly striving to gain control of the region, and Ukrainian missiles, which are presently a real factor of deterrence, do not in any way suit its "far-reaching" plans.

Another factor of Russian impatience is totally prosaic—the cost of the content of the Ukrainian warheads. This amounts to billions of U.S. dollars. That is why Russia demands that the warheads be transferred precisely to it. Kazakhstan, which had hitherto been "quiet," played a dirty trick on Moscow: On 13 December, an American-Kazakhstan agreement was signed—the Americans want to buy the entire uranium content of Kazakhstan's missiles. That uranium is worth about \$1 billion; therefore, this money is flowing under Russia's nose into Kazakhstan's treasury. Moscow newspapers immediately called Kazakhstan's missiles "in fact, Russian property" and regretted that Ukraine's uncompromising position is having such a bad influence upon Kazakhstan's behavior. Therefore, Russia's striving to get hold of Ukrainian warheads is perfectly understandable, as is also Moscow's anxiety on this point: There is no agreement between Ukraine and Russia on transferring warheads to Russian plants.

Russia's reaction to our parliament's decree on ratifying START-1 was all the more negative. At that time, Moscow resembled a furious fisherman looking at yet another empty hook. Kozyrev demonstratively refused to receive our Ambassador Volodymyr Kryzhanivskyy. The aforementioned appeal by Russian scientists to the world was quickly arranged. The Moscow press, having stopped pouring dirt by buckets, opened all the taps on the tank.

A few words on the decree itself. It is quite obvious that this document cannot be assessed in a simple way. Yes, despite

previous promises, we have actually become a nuclear power, although temporarily so; yes, the decree is at variance with some articles of the Lisbon Protocol under which our president's signature appears; yes, the document itself, from the point of view of politicians, contains rather naive points regarding security guarantees for Ukraine. However, it is pointless to assert either the wisdom or worthlessness of that document, proceeding from immediate considerations alone: Doubtless the future, perhaps, not so distant, will provide such an assessment. Let me remind you that the deputies almost unanimously (what a surprise!) approved the reduction, over seven years, of 36 percent of launch vehicles and 42 percent of warheads. They [the deputies] advanced conditions to the world: Never use nuclear weapons against Ukraine; do not use conventional armed forces against it, and do not resort to the threat of force; refrain from exerting economic pressure for the purpose of resolving any disputes; respect Ukraine's territorial integrity and inviolability of borders. By the time the decree was adopted, Ukraine had 176 vertical-launch installations with 1,240 nuclear warheads and 43 heavy bombers with 372 nuclear warheads.

That the position of the Ukrainian parliament should not be characterized in categorically negative terms was soon confirmed by the Russian elections in which Zhirinovskiy, a "sincere friend" of the former imperial colonies, triumphed. Anti-Ukrainian articles on nuclear topics immediately disappeared from Moscow newspapers (apparently, not for long). The world became concerned and a question arose: Is it generally safe to transfer the Union's nuclear weapons to Russia? At any rate, the warheads of 17 missiles that were deactivated by Ukraine at the end of December have remained "at home." At other times, this would have given rise to certain emotions in Russia. Now, there is complete tranquility. Maybe, the United States will also revise its policy with regard to Ukraine. So far, it only listened to what Russia was saying.

According to [Ukrainian President] Leonid Kravchuk, Ukraine will continue to adhere to its decision to become a nuclear-free state, but we will demand that a tripartite agreement be concluded with Russia and the United States. Meanwhile, an opinion is being formed among Ukrainian parliamentarians on the need for Ukraine to gain full control of its missiles: Such control on the part of Russia is dangerous for our country. It is significant that there is no nonaggression agreement between the two states. Besides, Russia's military doctrine envisages a preventive nuclear strike against nuclear countries. Technically speaking, according to specialists, it is not a major problem for Ukraine to gain positive control over the missiles. The problem is, rather, a political one.

Without doubt, we are in favor of a nuclear-free world. However, at present, a number of political and economic considerations prompt us to refrain from hasty steps, such as was the proclamation of the country's nuclear-free status at the dawn of our independence. At any rate, the fulfillment of the parliament's decree has already started, and this is a specific step toward a nuclear-free Ukraine.

BELGIUM

Reporting on Arms Exports to Third World, Confirmation

Paper Publishes Export Data

BR3012120393 Brussels DE MORGEN in Dutch 29 Dec 93 p 2

[Report by George Timmerman; place and date not given: "Belgian-Walloon Arms Exports: 'Business As Usual'—Trade to Gulf States Continues"]

[Text] Brussels, 29 Dec—In a few weeks Foreign Trade Minister Robert Urbain [PS: French-speaking wing of the Socialist Party] will have to present his report on the Belgian arms trade to parliament for the first time. The publication of such an annual report is set by the new and stricter arms act of 5 August 1991, which only came into effect on 16 April 1993. The new law, which prohibits arms exports to countries which do not respect human rights, was passed under pressure from the SP [Dutch-speaking wing of the Socialist Party] and the Volksunie [The People's Union]. All signs seem to indicate that despite the law, little has changed. The motto for the Walloon-Belgian arms manufacturers remains: "Business as usual."

The export of murderous weapons is traditionally viewed as a very sensitive political issue. It is not just a moral question. Since all the large producers of "classical" weapons are on the other side of the language border [Wallonia], it is also a loaded issue in community terms. Reasons enough to raise as much fog and secrecy as possible round this aspect of our export efforts.

On 17 May 1993 Volksunie Senator Nelly Maes asked Minister Urbain which countries in North America, the Near and Middle East are supplied with arms by Belgium. The answer was: "Since the publication of a list of countries which purchased arms in Belgium is extremely delicate given the relations with these countries, the discussion of this report [on the application of the new arms act] with the agreed confidential framework offers the opportunity to further break down the information into geographical areas."

In his answer, Urbain also revealed that since the new arms act took effect, from 16 April to 15 May, licences were granted for the definitive export of weapons, ammunition and materiel specially for military usage, to a value of 1,888 billion Belgian francs [BFr]. These products were overwhelmingly destined for NATO countries (BFr1,542 billion) and countries put on the same footing as NATO countries (BFr135 million), he said. Other areas appeared to be of secondary importance, according to Urbain's figures: the Near East (BFr48 million), Asia (BFr114 million), Latin America (BFr29 million), Africa (BFr2 million) and Eastern Europe (BFr15 million).

Double?

However, reliable and fairly detailed information in the possession of the editorial office, drawn up by the Customs and Excise Administration of the Finance Ministry, point

in another direction. This information mainly covers the period just before the new arms act took effect (January 1991 to July 1993). Of course the large and apparently very urgent arms deliveries to Turkey by plane from Zaventem fall under sales to NATO partners. However, a civil war is clearly taking place in Turkey, so that arms exports to it were prohibited under the old law too. In addition very large weapons consignments were transported by ship from Antwerp and Zeebrugge to Saudi Arabia and other Gulf States, such as Qatar, Oman and the United Arab Emirates. Has this enormous trade to the Gulf States suddenly dried up since the new arms act took effect? Since the middle of April this year all licence applications have been examined in the light of the provisions of the new arms export act, according to minister Urbain. All-in-all, in the first month since the new law took effect, "one export application was refused, because the destination was obviously violating human rights." In any case the amount quoted by Urbain of BFr1.8 billion in one month seems strikingly large. By way of comparison: Foreign Affairs Minister Willy Claes (SP), in answer to a parliamentary question in the past, said that Belgian arms exports stood at BFr11.5 billion in 1991. If the period under examination of mid-April to mid-May 1993 is representative of the whole year, then in the course of this year arms exports would have climbed to BFr21.6 billion. That is nearly double the amount compaired to two years ago.

Outdated

There was a time gap of no less that 18 months between the passing of the arms trade act by parliament and the publication of the implementation decrees in the Official Journal. During all this time the new arms act was in a dead letterbox. Insiders do not doubt that the postponement in the royal decrees should be blamed above all on delaying maneuvers by the PS.

This party, which is closely linked to the Walloon arms lobby, had every interest in the longest possible maintenance of the arms export licence system provided for under the outdated 1962 act. Only when a parliamentary committee of inquiry was set up due to the efforts of Louis Vanvelthoven [Dutch-speaking wing of Socialist Party], Nelly Maes [The People's Union] and Johan Van Hecke [Christian People's Party], could work be started on changing the law. On 10 September the text was published in the Official Journal. Scarcely two weeks later the "Martens eight" government fell over different interpretations by the communities of certain articles in the act. The French-speakers wanted a large arms delivery to Saudi Arabia. And they had their way, due to the lack of implementation decrees for the new act. Subsequently a mediocre scheme applied of "federalized" ministry arms export committees, each of which decided on the allocation of arms export licences for its own region. The task has been taken over by ministers Claes and Urbain since the present government took office.

Political Support

Belgian arms exports mainly benefit two companies located in Wallonia, namely Mecar and FNNH [New National Factory of Herstal, formerly FN]. Mecar produces a product range comparable to that of PRB, which in the meantime has been sold to the British Astra company. Mecar is a subsidiary of Allied Research Associates and most of its shareholders are U.S. officers and Saudi Arabian sheiks. Virtually the whole of Mecar's production is destined for countries like Kuwait, Saudi Arabia and until recently Iraq. Specialists point to the possibility of Mecar being specially set up in Belgium by the United States to get maximum benefit from the flexible Belgian legislation on arms exports. The Walloon-U.S. ammunition maker can count on the virtually unconditional support of a number of Walloon politicians.

The same applies to FNNH, at present owned by the French Giat [Association of Land-Based Weapons Industries] group. FN has long been the country's most famous arms producer. The Walloon regional investment company SRIW has not only provided repeated financial support to Mecar and FNNH. To safeguard the export licences of both companies, at the end of 1991 PS chairman Guy Spitaels was even prepared to have a political and institutional crisis, which led to the fall of the Martens cabinet.

Senator Says Reporting Correct

BR3012144193 Brussels DE MORGEN in Dutch 30 Dec 93 p 4

[Report by own correspondent G.T.: "Senator Nelly Maes Confirms Massive Arms Export"]

[Excerpts] Brussels, 30 Dec—"The data published yesterday by DE MORGEN are correct," according to Nelly Maes, VU [The People's Union] senator. For years she has been quietly battling weapons exports. After comparing DE MORGEN's articles with her own records based on numerous parliamentary questions, Senator Maes claims that the data perfectly match her information. [passage omitted summarizing referenced DE MORGEN articles]

In her opinion, some blatant samples of hypocrisy are the delivery of mortars to Zaire on 4 December 1991, the delivery of guns and munition to Angola on 3 April 1991, or the export of 308 crates of kalashnikovs to Saudi Arabia on 19 July 1991. [passage omitted]

Plutonium May Be Recycled to MOX

BR3012142393 Ghent HET VOLK in Dutch 28 Dec 93 p 4:

[Report by Luc Van Broeck: "With MOX in Nuclear Plant, Radiation for Staff Increases Slightly"]

[Text] Doel, 28 Dec—Following an extremely turbulent discussion, the Chamber passed the controversial MOX resolution. From now on spent nuclear fuels can be recycled into MOX fuel, to be used in nuclear plants. According to Electrabel the recycling of plutonium into MOX from spent nuclear fuels is a far better solution than

the very expensive storage. Electrabel points out that MOX is already used on a regular basis in similar reactors in Switzerland, Germany, and France, without any safety problems.

According to Electrabel the use of MOX will hardly change anything to Doel's operation and safety. "Surveys have established that the use of MOX in a nuclear plant raises the collective radiation dose for the staff by 1 percent at the most, which is much less than the normal variations from one year to another. For the people living close to the nuclear plant nothing changes," Electrabel says.

The standard fuel elements which are currently used in the nuclear plants at Doel and Tihange do not contain any plutonium when they are loaded into the reactor, but they do when they are removed from the reactor at a rate of roughly 5 kg of plutonium per element. So the main difference between a MOX- and a standard fuel element is the presence of plutonium. The term MOX refers to mixed oxide, made up of uranium and plutonium oxide.

In pursuance of a contract which was concluded in 1978, a small part of Belgium's spent nuclear fuel will be reprocessed in the French reprocessing plant at La Haque until the year 2000. Approximately 4,600 kg of plutonium will be recovered from these nuclear fuels. From the end of 1993 onwards, this quantity must return to Belgium, through annual deliveries.

"We should not forget," Electrabel emphasizes, "that 300 to 400 tonnes of MOX fuel is enough to ensure the whole Belgian power production for three years."

FRANCE

Nitterrand Does Not Rule Out MS-5 Missile Deployment

BK1101120394 Paris LE MONDE in French 11 Jan 94

[Article by Jacques Isnard: "A New Nuclear Missile on the Plateau of Albion?"]

[Text] For the first time, Francois Mitterrand is not ruling out the plan to bury a new missile in the silos of the plateau of Albion to replace the S-3D missiles currently there. In fact, although he does not give the code name, the French president is talking about the MS-5 strategic missile program, which is shrouded in the greatest secrecy. This missile would be intended to arm both so-called new-generation submarines by the year 2005 and the silos buried in upper Provence.

Since the early 1970's, the plateau of Albion has accommodated 18 ground-to-ground missiles capable of carrying a 1-megaton nuclear payload over a distance of approximately 5,000 km. These missiles have since been modernized. In view of the missiles' aptitude at thwarting—or not thwarting—hostile defense forces, which have supposedly gained in efficiency in the meantime, the missile base of the plateau of Albion could be obsolete by the beginning of

next century. Hence the current debate aimed at determining the weapons system which might succeed the one currently deployed on the plateau of Albion.

The debate is all about whether France can maintain three different systems—ground-to-ground missiles, seato-ground missiles, and air-to-ground missiles, as is the case today—or whether it should only maintain two of these—and, if so, determining which system could be abandoned. The answers given by the experts vary tremendously. Nothing has been decided as yet, and the next military planning law, which will cover the years 1995 to 2000, will no doubt judge the merits of the different options.

Recently, General Vincent Lanata, chief of staff of the Air Force whose forces serve the Albion plateau and whose aircraft carry air-to-ground missiles, has expressed his wish to have a more advanced airborne missile at his disposal.

Consequently, Mr. Mitterrand, who sets great store by the political and strategic symbol represented by the plateau of Albion, has just spoken for the first time about the possibility of simultaneously deploying—both in French submarines and in the silos in Provence—missiles which are based on the same basic design but can be adapted to either launch mode. This is the program dubbed MS-5, involving a missile with multiple warheads and a range of 8,000 km.

If this approach were definitively retained, it would presuppose that financial priority had already been given to the M-5 missile project, the version intended for submarines. However, what does one find? Launched in 1992, back when Pierre Joxe was defense minister, the program has been slowed down by the Balladur government in 1994 [year as published], to the great displeasure of the missile's constructor, the Aerospatiale group, whose CEO, Louis Gallois, has unceasingly maintained that the M-5 is of primary interest. The M-5 even figures among the projects threatened with being staggered over an even longer period—along with the future transport plane, the antimissile defense systems, certain equipment for use in space, and the NH-90 logistical helicopter—if the military planning law allocates insufficient funds.

Leotard Calls For Resumption of Nuclear Testing AU1001102994 Paris AFP in English 1004 GMT 10 Jan 94

[Excerpt] Paris, Jan 10 (AFP)—France ought to resume nuclear weapons testing as soon as possible, Defence Minister Francois Leotard said here Monday [10 January], contradicting President Francois Mitterrand.

Speaking in a radio interview, Leotard said the precise reason for resuming tests was to acquire simulation techniques. [passage omitted on Mitterand interview covered by referent item]

Super-Phoenix Reactor May Be Reactivated

LD1801150794 Paris France-Inter Radio Network in French 1400 GMT 18 Jan 94

[Text] A report has come out envisaging the reactivation of the Super-Phoenix [fast breeder reactor] under certain conditions. (Andre-Claude Lacoste) of the Nuclear Safety Directorate says in this report—which was submitted this morning to the Industry and Environment Ministry—that from the point of view of safety, the reactivation of the reactor could be authorized given two conditions: that the work on combatting sodium leaks is completed successfully, and that the reactor should be brought into service at reduced power for a few months. In other words, Super-Phoenix will be reactivated.

GERMANY

Siemens Has Nuclear Fuel Processed in Russian Factory

AU2712111693 Frankfurt/Main FRANKFURTER RUNDSCHAU in German 24 Dec 93 p 1

[Joachim Wille report: "Siemens Has Nuclear Fuel Processed in Russian Nuclear Factory"]

[Text] Frankfurt/Main, 23 December—Siemens AG and the FRG Environment Ministry have confirmed information obtained by FRANKFURTER RUNDSCHAU about cooperation between the German corporation and a Russian nuclear factory in the processing of nuclear fuels. As Siemens spokesman Rainer Jend said in Hanau upon inquiry, a first shipment of uranium material to the Tomsk nuclear complex in Siberia had already taken place without this so far being made public knowledge.

A total of 140 tonnes of "slightly impure residue" obtained in the production of nuclear power station fuel elements at Hanau are to be reprocessed in Tomsk by the end of next year. This is stipulated by a "service contract" concluded with the Russian Ministry of Atomic Energy. In return, Siemens imports two shipments of about 70 tonnes of so-called enriched uranium-hexafluoride from Tomsk in order to manufacture new fuel elements in Hanau. The nuclear waste produced during processing in Tomsk is disposed of in Russia. According to Siemens, only small quantities are involved.

The Siemens spokesman pointed out that the deal with the "Siberian Group of Chemical Enterprises Tomsk," a branch of the Russian Ministry of Atomic Energy, has been approved and supported by the responsible German and Russian bodies. According to him, the Federal Radiation Protection Office, the Federal Export Office, and the European nuclear authority EURATOM were involved. As Cay Friemuth, spokesman of the Bonn Environment Ministry, said, the permits were granted as early as in July 1993 with the participation of his Ministry and of the Economics Ministry. The first shipment to Tomsk was sent on its way via the land and sea route on 21 October. According to the regulations of the nuclear law, the permit must be renewed for 1994; this will probably be done, Friemuth said.

Upon inquiry by FRANKFURTER RUNDSCHAU, Siemens spokesman Jend said that it is still open whether the 140-tonne project will turn into lasting cooperation with the nuclear complex in Siberia. However, he pointed to the

"cooperation agreement for the field of nuclear fuel circulation," which was concluded by Siemens and Russian Atomic Energy Minister Viktor Mikhailov in September. This agreement involved joint projects in, for instance, the construction and storage of fuel elements and the processing of plutonium from the Russian nuclear weapons.

The 140 tonnes of impure uranium material, which have accumulated in Hanau, cannot be purified and enriched on site, according to Jend, because the part of the fuel element factory, which would be suitable for this work, has been closed down since a hydrogen explosion on 12 December 1990. Processing in Hanau would be possible only in the new Siemens factory, about the approval of which Siemens and the Hesse land government have been engaged in a legal quarrel for some time. Jend said: "You must ask Minister (Joschka) Fischer, when we can do that in Hanau."

Asked about the safety of Russian nuclear factories, Jend said that Siemens experts convinced themselves in Tomsk that the processing would be conducted in line with the internationally usual Purex process and that "high quality standards" are achieved in the process. Jend did not accept the reference to the nuclear accident in Tomsk, during which an explosion released plutonium last spring and 200 square kilometers were radioactively contaminated. This "was in a completely different corner" of the large nuclear complex, where several thousand people work.

In its assessment of the safety in Tomsk, the Environment Ministry relies on the International Atomic Energy Agency (IAEA) in Vienna, which has access to Tomsk. Spokesman Friemuth said that his Ministry has to accept the safety standards if the IAEA does not have any indications of irregularities.

CDU/CSU Criticizes Strict Arms Export Controls AU0501141194 Munich SUEDDEUTSCHE ZEITUNG in German 5/6 Jan 94 p 2

["deu"-signed report: "Union Bundestag Group Wants To Facilitate Arms Exports"]

[Text] Bonn—The dispute dividing government and opposition on the subject of arms export controls is intensifying. Pressured by the arms industry, the coalition Bundestag groups and the Economics Ministry are trying to relax the German guidelines for arms export, which are stricter than those of most other countries. One of the reasons for this is job security. The foreign policy spokesman of the Christian Democratic Union [CDU]/ Christian Social Union [CSU] Bundestag Group, Karl Lamers, told a newspaper that the German arms export guidelines put German companies at a disadvantage: "Thousands of jobs and high-tech know-how that are of enormous importance for the civilian industry threaten to be lost."

Lamers demands a uniform European Union [EU] policy on arms exports. This is also mentioned as an objective in the section on joint foreign and security policy of the Maastricht treaty. Lamers said that, due to the resistance of other European states, however, the high German standards cannot be maintained in Brussels.

Bonn's attempts to facilitate the exporting of arms via Brussels meet with strong resistance from the Social Democratic Party of Germany [SPD]. SPD Bundestag Group manager Peter Struck said the constitution demands that the Bundestag has to be consulted by the Federal Government first. The constitutional amendment passed when the Maastricht treaty was ratified says: "The Federal Government, before agreeing to an introduction of new laws by the EU, gives the Bundestag the opportunity to comment. The Federal Government bases its negotiations on these comments."

The deputy SPD chairwoman and European affairs expert, Heidemarie Wieczorek-Zeul, accused the government of negotiating a softening-up of the arms export guidelines in the European Council of Ministers, "behind the Bundestag's back, ignoring the constitution, and excluding the public." The government is "by no means entitled to do this."

The Economics Ministry denies negotiating uniform export guidelines for traditional armament products within the EU. These negotiations only refer to dual-use products. This means products that can be used for both civilian and military purposes, such as machinery, special steels, and pesticides. The government coordinator for aerospace and space technology, Reinhard Goehner, has repeatedly said that it will not be possible to maintain the strict German export regulations. Negotiations on dual-use products have reached the final stage.

The German guidelines for traditional arms and dual-use products were tightened after the Second Gulf War in early 1991. United Nations inspectors had discovered that a large share of Iraqi dictator Saddam Husayn's arms supply came from German companies. Since then, the German arms industry constantly complained about disadvantages as compared to other countries, especially France and Great Britain.

Arms producers from these countries have blamed the Germans for being unreliable, the German arms industry said. Over the past four years, 280,000 jobs were lost in the armament industry. Yet, according to the Stockholmbased SIPRI Institute, with a 3.1 billion German marks turnover, Germany was still the world's third-largest arms exporter in 1992.

SWITZERLAND

Airplane Manufacturer Applies Stricter Policy on Exports

BR2212130893 Bern ATSA/SDAA in French 1721 GMT 20 Dec 93

[Article signed: "Pilatus: Oscar J. Schwenk Named Director for Development"; as released by Bern ATSA/SDAA database]

[Text] Zurich, 20 Dec (ATSA)—Aircrast manufacturer Pilatus based in Stans (Nidwalden demicanton) has appointed a new director to replace Walter Gubler, who was fired last March. Oerlikon-Buehrle, the group to which Pilatus belongs, announced that Oscar J. Schwenk will take up duties on 1 January 1994. Ernst Thomke, who temporarily managed the company after Mr. Gubler left, will resume his responsibilities as president of the administrative council.

Oscar Schwenk has been working for Pilatus since 1981, most recently as a member of the board of directors responsible for the division "operations." His predecessor had been dismissed with immediate effect on 26 March 1993. Mr. Gubler was blamed for having authorized a second delivery of aircraft to Burma, although he knew that the planes in the first delivery had been equipped with arms.

With this dismissal, Pilatus wanted to start anew. At the time the company declared that in the future it wanted to avoid at all costs the possibility of its planes being equipped with arms. Pilatus wants to establish itself more strongly in the small civil airplane market. For instance,

during the summer, the manufacturer had tried to take over the American company Piper.

This past summer, Ernst Thomke together with Hans Widmer, head of Oerlikon-Buehrle, had strongly committed themselves to exporting training planes to South Korea and Nigeria. At the end of September, the federal council had agreed on the delivery of 20 PC-9 planes to South Korea and to seven PC-7 planes to Nigeria.

Ernst Thomke, a Swiss manager, had left the board of SMH [Swiss Corporation for Microelectronics and Watchmaking Industries Ltd.] on 1 June 1991. He had played an important role in the success of Swatch. One year later he became manager of operations for the group Motor-Columbus.

Mr. Thomke, who lives in Granges, is a member of the administrative councils of ATEL, SAEG Refindus, Studer Revox, and Swissmetri. Rumour has it that he might succeed the director of Ascom, Leonardo Vannotti. He himself denies being contacted by Ascom.

North Korea, IAEA Fail to Make Progress in Second Round

SK1101002594 Seoul YONHAP in English 0017 GMT 11 Jan 94

[Text] Vienna, Jan. 10 (YONHAP)—North Korea and the International Atomic Energy Agency (IAEA) held a second official working-level contact Monday [10 January] but failed to make any progress on arranging IAEA inspection of North Korean nuclear facilities.

Yun Ho-chin, a councilor at the North Korean Embassy in Vienna, represented his country at the two-hour talks, in which the IAEA explained technical details of the need to maintain continuity in surveillance materials in response to the North Korean position conveyed at the first meeting Friday [7 January].

The IAEA presented its explanation and demands to the North Korean side on paper.

"The North Korean representative and the IAEA had a working-level contact to discuss problems of inspection on North Korea's reported nuclear facilities on Monday," IAEA Spokesman Hans Meyer said.

"At the meeting, the IAEA has conveyed technical requirements (for the inspection) to the North Korean side."

Meyer declined to disclose further information.

One IAEA source said, however, the IAEA action means that there are differences of opinion on the scope of the inspection on North Korea's seven reported nuclear facilities.

Practical problems such as dispatch of the inspection team could be discussed only after the two sides agree on the scope of the inspection, the source said, requesting anonymity.

At Friday's meeting, North Korea told the IAEA that it would not accept inspection of two sites, a radiochemical laboratory that is in effect a nuclear reprocessing facility and a 5-megawatt reactor, another IAEA source said.

As a result, the two sides are standing far apart as the IAEA demands opening of those two facilities as well, the source said.

Spokesman David Kyd, meanwhile, said that the IAEA does not expect immediate progress in the problem of inspection on two unreported sites believed to be nuclear waste storage facilities.

The two sides are expected to resume their talks this week.

IAEA Delivers Technological Check List to North Korea

SK1001232394 Seoul KBS-1 Radio Network in Korean 2210 GMT 10 Jan 94

[Report by Cha Man-sun from Vienna]

[Text] During a working-level contact with North Korea on 10 January, the International Atomic Energy Agency

[IAEA] delivered a technological check list on the collection of samples from nuclear material and the examination of an operation diary [unyong ilchi] of seven nuclear facilities and requested that North Korea inform the IAEA of its decision on accepting inspections within this week.

The IAEA also informed the North Korean side that in order to inspect seven facilities in accordance with the technological check list, it is necessary that at least six to seven inspectors carry out activities for three weeks.

It was learned that the technological check list delivered to North Korea includes items on determining if the number and material of the five megawatt-nuclear fuel rods in Yongbyon correspond with what North Korea had previously reported to the IAEA, examining the operation diary, and replacing surveillance equipment.

In particular, it was learned that, if a radiochemical laboratory is a reprocessing facility, the amount of nuclear material remaining in tanks and pipes will be measured. In addition, samples from the laboratory will collected and inspectors will check sealed devices and replace surveillance equipment. Public attention is focused on the North Korean response, which is expected in two or three days.

IAEA To Transfer Batch of Enriched Iraqi Uranium to Russia

NC0901155894 Paris AFP in English 1527 GMT 9 Jan 94

[Text] Baghdad, Jan 9 (AFP)—International Atomic Energy Agency (IAEA) experts are preparing the transfer of a second batch of Iraqi enriched uranium to Russia, UN sources said here Sunday.

The team is working at a site near Baghdad and hopes to complete its mission by the end of January, the sources said without specifying the quantity involved.

Last month the same group supervised the removal and shipment by air of 33 kilograms (73 pounds) of irradiated fuel from Iraq to Russia.

In October, IAEA chief Maurizio Zifferero said that some 35 kilograms (77 pounds) of enriched uranium would be transferred to Russia.

The IAEA, a Vienna-based United Nations agency, and Iraq signed an accord in April for the removal of 35 kilograms of uranium. The agreement was reached during a mission of IAEA inspectors led by Zifferero, who said at the time that the operation would cost Iraq several million dollars.

Last November the IAEA shipped 12 kilograms (27 pounds) of non-enriched uranium from Iraq to Russia.

The transfers are in line with UN Security Council resolutions to disarm Iraq after the Gulf war in 1991.

DPRK Will Not Allow IAEA to Extract Samples From Fuel Rods

SK0801015894 Seoul YONHAP in English 0148 GMT 8 Jan 94

[Text] Tokyo, Jan 8 (YONHAP)—North Korea has accepted U.S. demands to allow the International Atomic Energy Agency (IAEA) to inspect its nuclear sites in principle, but with the proviso that the IAEA inspectors do not take samples of the fuel rods, the ASAHI SHIMBUN reported Saturday.

The IAEA is going to consult with North Korea on details of the inspection soon, and the United States is trying to persuade it to allow the third round of U.S.-North Korea high-level talks to make a decision on the issue of taking samples, the daily newspaper quoted a South Korean Government source as saying.

North Korea said that, of its seven declared nuclear installations, it would rather not allow inspections of the 5,000 kilowatt experimental reactor and radiochemical laboratory, according to the paper.

Pyongyang has insisted that it would never allow the inspectors to take samples from fuel rods, a process that is indispensable to measuring of the amount of plutonium that has been extracted.

The United States agreed to discuss the sample problem and special inspections of two undeclared sites in the high-level talks, the paper said.

At an inspection in 1992, the IAEA asked North Korea for fuel rod samples but was rebuffed.

"We had not prepared to halt our experimental reactors," they were told. "The crane to pull up the fuel rods is out of order."

With the North Korean condition, the IAEA is dissatisfied with the inspection, but the United States is persuading it that it is more important to solve the North Korean nuclear problem through dialogue, the ASAHI said.

IAEA Increases Number of Experts for DPRK Inspections

SK0601224194 Seoul KBS-1 Radio Network in Korean 2100 GMT 6 Jan 94

[By Cha Man-sun from Vienna]

[Text] The International Atomic Energy Agency [IAEA] plans to increase significantly the number of inspection experts and send them to Pyongyang in order to restore the continuity of inspections, which was greatly damaged by the suspension of operation of monitoring equipment in North Korean nuclear facilities and by North Korea's refusal of inspections.

A relevant IAEA high-ranking official said that through overall inspections [chonmyon sachal], which will be resumed in the future, the IAEA plans to restore the damaged continuity of inspections of North Korea. Toward this end, it will send the inspection team to Pyongyang after adding three or four additional experts.

He stressed that the IAEA plans to send an inspection team of approximately seven experts to Pyongyang for the nuclear inspection of North Korea, which will be resumed in the future. He said he was not sure if North Korea would accept the seven experts because the IAEA has not received an official message from the North Korean side yet. He said, however, that the IAEA plans to discuss the issue with North Korea through consultations.

He stressed that the inspections must be regularly conducted in order to completely restore the continuity of inspections and he expressed the hope that North Korea will respond positively.

He said that the inspection team, which is ready to go to North Korea now, is standing by in order to change monitoring equipment in North Korean nuclear facilities, including six monitoring cameras and over 40 pieces of sealing equipment [pongin changchi] and to check in detail the total stock of nuclear material that has not yet been examined.

India, Japan Discuss Nonproliferation Treaty BK1801151294 Delhi All India Radio Network in English 1430 GMT 18 Jan 94

[Text] India and Japan have agreed to work together to bring about a nondiscriminatory Nuclear Nonproliferation Treaty. The present treaty expires in 1995. The matter came up for discussion at the second round of bilateral talks on nuclear and disarmament issues between the two countries in Tokyo yesterday. The Indian delegation was led by the joint secretary in the Ministry of External Affairs, Mr. Dilip Lahiri, and the Japanese side by his counterpart, Mr. (Yukio Takiuchi).

Germany's BKA Warns Against 'Nuclear Crime' From Ex-USSR Dealers

AU1801193794 Hamburg BILD in German 18 Jan 94 p 2

["Hoe" report: "Alarm! BKA Warns Against Uranium Dealers"]

[Text] The Federal Office of Criminal Investigation (BKA) is sounding the alarm! Increasingly often, gangs of profiteers from the ex-USSR are trying to sell nuclear material. In 1993 alone, 23 uranium dealers were caught, more than 150 investigation proceedings were instituted, and 50 kg of deadly uranium was confiscated. BKA President Zachert told BILD: "With nuclear crime, a new quality of organized crime has developed. It seems to be possible that nuclear material of different origins is falling into unauthorized hands."

Brazil Signs Trade-Technology Accord With Russia 94P20159Z

[Editorial Report] Crowning months of secret negotiations and reciprocal visits, in early December Brazil and Russia signed a broad trade agreement designed to boost their annual trade from \$200 million to \$2 billion within a five-year period. The agreement includes cooperation in

aerospace research, mutual technology transfer of military materiel, joint ventures in oil production and construction, and other transactions.

Brazil and Russia signed a trade agreement on 3 December to increase their annual trade from \$200 million to \$2 billion over the next five years, military correspondent William Waack reported in the 4 December conservative daily O ESTADO DE SAO PAULO. During his official visit to Russia from 1 to 3 December, Brazilian Minister of Industry, Commerce, and Tourism Jose Eduardo de Andrade Vieira and Russian Foreign Economic Relations Minister Oleg Davydov discussed the possibilities of space research, transfer of supersonic airplane technology, and exports of Brazilian foodstuffs. Waack noted, however, that everything still hinges on an interbanking agreement that has not even been initiated.

During his Moscow trip, Waack continued, Vieira also visited the Moscow Space Center and was again told by the Russians that they would like to use the Alcantara launch site in Maranhao State for the international Iridium project. Vieira spoke favorably of the project, which envisages placing roughly 60 communication satellites in orbit within the next two years, and said that he would present it to Brazilian President Franco. Moscow's independent, business-oriented KOMMERSANT-DAILY of 4 December, however, said that plans for Russian participation in the project were being developed "at Brazil's suggestion." The Moscow state-run news agency ITAR-TASS on 3 December also quoted Vieira as saying that he had met earlier in the day with Russian Deputy Prime Minister Aleksandr Shokhin to discuss Brazil's participation in the international Iridium space communications project involving the use of Russian Proton booster rockets. Brazil's O ESTADO DE SAO PAULO of 4 December cited diplomats familiar with this issue saying that "the main obstacle" to this project would soon be removed: The Brazilian government is now "willing" to join the Missile Technology Control Regime soon, accepting "an international code of conduct that does not allow the transfer of the technology for building and operating missiles to third parties."

Arms and Aerospace

KOMMERSANT-DAILY of 4 December noted that "Russia has long been mulling over plans for an outlet to the Latin American arms market. Brazil may become a good springboard for the products of the Russian aerospace complex. In Moscow, the Brazilian side once again expressed interest in joint development of inertial guidance systems for space-launch vehicles."

O ESTADO of 4 December reported that the Monteiro Aranha Group has been negotiating for 18 months with the Russians to purchase defense materiel to assemble Russian MiG-29 supersonic fighters at the Brazilian Aeronautics Company (Embraer) facilities, as well as to buy ships and helicopters. The source quoted one of Vieira's advisers to the effect that the Monteiro Aranha Group "sought a fait accompli so the Armed Forces would have to approve these deals."

Moscow's ITAR-TASS and official military newspaper KRASNAYA ZVEZDA, as well as various Brazilian dailies, speculated extensively during September on the ongoing negotiations between the two countries over possible swaps of Russian war materiel for Brazilian foodstuffs. Rio de Janeiro daily JORNAL DO BRASIL on I December, however, noted that Frederico Robalinho, trade policy secretary of the Brazilian Ministry of Industry and Commerce, has denied knowing anything about reported Brazilian government purchases of Russian arms. According to JORNAL, reports of possible exchanges of Russian arms for Brazilian food products began circulating in September when Brazilian Army Minister Zenildo Zoroastro de Lucena visited Russia. Robalinho, however, commented only that Brazil is interested in the purchase of helicopters such as the MI-26, spare parts and maintenance of military equipment, as well as a nonmilitary ship to replace the "Barao de Tefe" in the Antarctic. Robalinho, JORNAL added, described this negotiation as "historic' because Brazil and Russia are for the first time carrying out an accord that will develop all possible trade opportu-

In a related press report, the weekly Sao Paulo news magazine ISTOE reported on 24 November that the Brazilian Army will receive Russian surface-to-air missiles that will be distributed to various infantry headquarters. The delivery of the missiles, according to ISTOE, will begin early in 1994. In an earlier "exclusive" report (ISTOE, 18 November) regarding the negotiations between Brazil and Russia, Army Minister General Zoroastro lauded the "great efficiency of light arms, particularly grenade launchers, manufactured by the Russian defense industry. General Zoroastro also announced that talks between Brazil and Russia to designate a Brazilian Armed Forces attache to Moscow have been concluded; likewise, Russia would have an Army attache assigned to Brasilia."

Background of the Accord

On 18 November, leading Sao Paulo business daily GAZETA MERCANTIL provided considerable detail on the scope and background of the then upcoming Russia-Brazil trade accord. GAZETA commented that the governments of Brazil and Russia had concluded their largest ever economic agreement, the result of "authentic diplomatic engineering spanning five years of secret negotiations" and the "final intermediation, in the Brazilian private sector, by the two Rio entrepreneurial groups, Monteiro Aranha and its associate, ITS Participacoes." The accord provides for bilateral trade increasing to \$5 billion in the next five years, with financing from the two governments. The annual volume of trade anticipated is almost six times greater than the \$172 million projected for 1993, GAZETA added.

During this period, GAZETA continued, Brazil is committing itself to purchasing various Russian arms and ammunition, rockets, large military helicopters for use in the Amazon Region, special fishing boats and ice-breakers, hydraulic and thermal turbines and generators, petroleum and its by-products, gas, chemical-pharmaceutical products, fertilizers, nonferrous metals, primarily aluminum

and its by-products, and Portland cement. Russia, in turn, will buy from Brazil the following: designs for hydroelectric and thermoelectric plants; agricultural equipment; beef and pork; soybeans and derivatives; sugar, cocoa, and coffee; textiles; and finished and semifinished shoes.

Two lines of credit have been specially established in the "store account" system, GAZETA continued. In sales of raw materials and commodities to Russia, the term of payment will be one year and at London Inter-Bank Overnight Rate (LIBOR) rates. In exports of equipment, machines, and manufactured products, the term will be five years, also at LIBOR rates. Banks and firms directly involved are Bank of Brazil, Sao Paulo State Bank, Monteiro Aranha, Andrade Gutierrez, Embraer, Brazilian Petroleum Corporation (Petrobras), Ceval, Vinicola Aurora, Tramontina, Iochpe-Maxion, Grendene, Portobello, Olvebra, Artex, and Neiva.

KOMMERSANT-DAILY of 4 December said that lines of credit from the Russian side will probably be provided by Mosbiznesbank, Mezhkombank, Imperial Bank, and the Export-Import Bank. The accord also provides for the establishment of "joint ventures" including the following enterprises:

—Andrade Gutierrez and Monteiro Aranha, in association with Agrarian Technologies of Russia, Neftkom, MID-Continent of the United States and John Brown of Great Britain, to design and build a refinery in Krasnodar;

-Brazilian firms and Anglo Resources Ltd. in oil exploration in the Stavropol Basin;

—Monteiro Aranha and Anglo Siberian Oil Ltd. in developing the design and construction of a refinery in Krasnoyarsk, as well as participating in the consortium to build a bridge over the Yenisey River in the same area.

Providing an historical perspective to the agreement, GAZETA went on to say that from the diplomatic standpoint, this accord with Russia has a very special strategic dimension, particularly concerning cooperation in "sensitive" technologies that will be started with "very smallscale transactions." Such, it went on to say, is the case of the association of Embraer with the Russian aeronautical and space conglomerate, Aviaprom, together with Mashinoeksport, the sectoral foreign "trading" company. The two Russian firms presented a formal proposal to Embraer to form a multinational group, in which Argentine and South African state firms would participate to develop the CBA-123, a civilian aircraft that has been gradually developed by Embraer. Aviaprom and Mashinoeksport subsequently invited Embraer to examine their "Delfine" and 'Be-30" models with Russian TVD-1500 and TVD-20 turbines of similar performance to the U.S. Garrett TRF3SI-20 that would be used in the CBA-123. The three firms then began the technical discussion involving the "plan, production, and sales" of a line of agricultural planes with two basic models having a capacity of up to 0.6 and 2.5 tons respectively.

The technical discussions, GAZETA continued, were followed by a letter from Aviaprom President A. Gereshchenko to Embraer President Ozires Silva in October 993 noting that "we have a good basis for cooperation." There followed a written invitation from Gereshchenko and Mashinoeksport Vice President I. Latin for Embraer to participate in "the creation and operation" of the Burlak aerospace complex. Both Gereshchenko and Latin had been in Brazil in February 1993 in a secret visit to the Alcantara launch site in Maranhao, GAZETA pointed out, and then noted that 10 weeks later, Embraer, Neiva, Aviaprom, and the Myaslshchev Design Bureau signed a protocol to launch communica- tion satellites from Alcantara. There was, according to GAZETA, a parallel accord between the Monteiro Aranha group and Khrunichev Enterprise to use Russian rockets as launchers. The Monteiro Aranha group also signed an agreement with Rostvertol in Rostov to sell large Russian helicopters of the Mil line in Brazil.

GAZETA further noted that in September 1993, Army Minister General Zoroastro headed a military delegation to Russia to study military equipment and missile technologies available to Brazil, and added that the Brazilian Government has been trying to attract partners to its space program by offering the use of the Alcantara site, where satellite launches cost an average 20 percent less than from any other launch site in the world. In addition to Russia, Brazil is engaged in negotiations with China, which Strategic Affairs Secretariat Minister-Chief Mario Cesar Flores has often called "the partner of the future," GAZETA concluded.

Rabin Calls Czech Nuclear Supplies to Iran 'Dangerous'

AU2312164693 Prague CTK in English 2029 GMT 22 Dec 93

[Text] Prague, Dec 22 (CTK)—Israeli Prime Minister Yitzhaq Rabin "emphatically," requested Foreign Minister Josef Zieleniec during his visit to Israel last week that the Czech Republic not supply any nuclear power components to Iran, not even components considered useful exclusively for peaceful purposes, Israeli Ambassador to Czech Republic Moshe Yegar told CTK today.

He added that any deliveries to Iran having to do with nuclear energy are extraordinarily dangerous.

While in Israel, Zieleniec denied that any Czech exports to Iran could be used for non-peaceful purposes.

The Israeli Government's request to the Czech Republic is justified by the "terrorist" nature of the contemporary regime in Iran, the ambassador explained. He said Iran wants to obtain nuclear weapons "at any cost," and references to allegedly peaceful uses of nuclear power are only excuses to attain that goal.

Nuclear potential in Iran would be "an extraordinary and alarming danger" for the entire near east, Yegar warned.

The Czech company Skoda Plzen, which has experience in building nuclear power plants, admitted last week that its

director had visited Teheran in November allegedly to discuss "supplies of parts for a nuclear power plant."

The American daily THE NEW YORK TIMES reported that according to American intelligence services, Iran has engaged in a secret program for the production of nuclear weapons. The paper said that Americans fear that Czech civil supplies could help Iran to obtain nuclear waste, which it could then transform into plutonium, the main component in nuclear explosives.

Glavkosmos Works Out New Rocket Contract With India

LD0901101594 Moscow RIA in English 0847 GMT 9 Jan 94

[Text] Moscow, RIA—The contract for supplies of rocket engines and technology from Russia to India, concluded in 1991 between the commercial company Glavkosmos and the Indian Space Research Organisation [ISRO], may be saved, a Glavkosmos official, asking not to be identified, suggested in an interview with a RIA correspondent.

The fulfilment of the 2.250 million rupees contract was suspended after the United States accused Russia of violating the regime of control over the transfer of rocket technologies. In the opinion of the American side, India could use the Russian engines for launching its ballistic missiles.

In December 1993 a delegation of Glavkosmos held talks with the representatives of ISRO, during which a new version of the agreement was worked out. It has been sent for approval to the Russian Government. In the opinion of Glavkosmos experts, there is now hope that this version will be approved because "both politically and economically it is advantageous to Russia and does not violate the terms of the control regime."

Glavkosmos has already received over 1 billion rupees from the ISRO and is planning on account of the remaining part of the contract to transfer to India two take-off rocket blocks and equipment for their operation. India, in turn, guarantees Glavkosmos specialists access to the places of assembly, testing and launching of its rockets with mounted Russian engines.

Dutch Group Opposes Sale of Sub Technology to Taiwan

BR2312140293 Rotterdam NRC HANDELSBLAD in Dutch 22 Dec 93 p 1

[Article by Willem van Kemenade and Theo Westerhoudt: "Van Der Stee Starts Action Against Rotterdam Dry Dock Company's Trade With Taiwan"]

[Text] The Hague, 22 Dec—Former Minister A. van der Stee (CDA [Christian Democratic Appeal]) is heading a group of major Netherlands companies lobbying to halt the possible export of submarine parts by RDM [Rotterdam Dry Dock Company] to Taiwan.

The group, comprising representatives of Shell, Akzo, DSM [Dutch State Mines], Philips, Stork, and Fokker,

fears that, if RDM's deliveries to Taiwan are carried out, it will have a negative impact on their trade relations with the PRC.

RDM has an opportunity to deliver nonstrategic parts for submarines to Taiwan. Such an order, which is expected to be worth several hundred million guilders, is very important for the Rotterdam company's existence.

Van der Stee, who is chairman of the China section of the Netherlands Center for Trade Promotion (NCH), confirmed this morning that he had recently talked to Prime Minister Lubbers, Economic Affairs Minister Andriessen, Finance Minister Kok, and Foreign Minister Kooijmans in an attempt to protect the Netherlands companies' interests in the PRC. "The Chinese surely will condemn us for our hypocritical policy and this will have a negative effect on our trade relations," Van der Stee claimed. "China currently has a 10-13 percent growth rate and the Netherlands should profit from that. One must avoid anything that could conflict with this interest."

Belgian Arms Exports to Middle East, Third World Detailed

BR3012143893 Brussels DE MORGEN in Dutch 29 Dec 93 p 2

[Report by Georges Timmerman: "Saudi Arabia Remains a Mega Customer"]

[Text] Brussels 29 Dec—Most of the 120 major weapons shipments from the ports of Antwerp and Zeebrugge in recent years have been destined for Saudi Arabia or the other Gulf States.

Detailed information in DE MORGEN's possession shows that between January 1991 and April 1993 more than 40 consignments of Belgian weapons left for Saudi Arabia, seven went to Qatar, five to Oman and five to the United Arab Emirates.

Mecar-Seneffe [subsidiary of Allied Research Associates] mainly supplied smoke generators, igniters, percussion caps, rifle grenades and mortar bombs to the Saudis. However, FN Herstal [National Factory of Herstal] was the biggest supplier.

This company supplied hundreds of pallets of ammunition of every caliber, automatic hand weapons, rifles, machine guns, heavy machine guns, mortars, Kalashnikovs, hand grenades, antitank projectiles, anti-aircraft artillery and components for every type of other weapon.

The lists of arms shipments from our two sea harbors show that a considerable share of Belgian arms exports were destined for Third-World countries.

For example arms shipments went to Thailand (11 tonnes of war ammunition and 755 tonnes of components for 155-mm projectiles from FN Herstal on 8 February 1991), Venezuela (2,000 rocket motors and 1,560 rocket heads from Forges de Zeebruges on 12 February 1991, 13 tonnes of ammunition and projectiles on 31 December 1991), Chile (two 90-mm cannons with accessories from Cockerill-Seraing on 14 May 1991 and 28 February 1992),

Botswana (some 7 tonnes of arms, components and bayonets from FN Herstal on 19 September 1991), Taiwan (3 tonnes of arms and components from FN Herstal on 14 January 1993, various shipments of rocket motors from Forges de Zeebruges) and Indonesia (79 tonnes of ball powder from PB Clermont on 13 December 1991).

Third-World countries were also massively supplied with Belgian arms from Ostend and Zaventem airports.

To give a few examples: 945 kg of explosives, grenades, and gas masks to Rwanda (6 January 1993), 14.9 tonnes of arms components and ammunition to Dubai (28 April 1991), 144 kg of arms to Singapore (29 July 1991), 325 kg of mortars to Zaire (4 December 1991), more than 5 tonnes of arms and accessories to Jordan (25 March 1992), 425 kg of ammunition to Burkina Faso (23 April 1992), 320 kg of arms to Brazil (24 September 1992), and 9 tonnes of ammunition and 22 tonnes of explosive to Somalia (19 December 1992).

Algeria Pledges Peaceful Use of PRC Built Nuclear Reactor

OW2512042893 Beijing XINHUA Domestic Service in Chinese 1452 GMT 24 Dec 93

[Newsletter by XINHUA reporter Wang Jingcheng (3769 2417 6134): "A Flower of Nuclear Science and Technology Jointly Cultivated by China and Algeria"]

[Text] Algiers, 24 Dec (XINHUA)—At a little past 10 AM on 21 December, a special Boeing-767 plane landed on (Ain Wusela) military airfield 250 kilometers south of Algiers. Nearly 200 excited passengers, including Algerian government officials, most foreign diplomats in Algeria, and foreign and Algerian reporters, walked off the plane and continued the journey by bus toward a vast stretch of wilderness. Half an hour later, a cluster of beige buildings appeared on the horizon.

This is the site of (Ain Wusela) Science Town, so named in Algeria's development plan. The first group of buildings completed in the science town are those of the 15,000-kilowatt heavy water reactor built by Algeria in cooperation with China. On the occasion of the 35th anniversary of the establishment of diplomatic relations between China and Algeria on 21 December, the Algerian government held a grand inauguration ceremony for the reactor.

The multi-function heavy water reactor was completed after five years of close cooperation between Chinese and Algerian scientists in overcoming various difficulties. China provided Algeria with technology and a complete set of facilities [she shi 6080 2457], and trained relevant Algerian scientists and technicians. During the one-year warranty period, the reactor, operated by Algerian scientists and technicians, has shown that it is up to the designed standards in all functions and composite indexes [zong he zhi biao 4844 0678 2172 2871].

Djebbar, minister of national education of Algeria, presided over and addressed the ceremony. He said that the Algerian government is satisfied with the effective cooperation between the two countries in the high-technology field. During the ceremony, Algerian Foreign Minister Dembri said the reactor is entirely for the purpose of scientific research on the peaceful use of nuclear energy. For this reason, he solemnly declared in the name of his government: "Algeria is preparing to join the Nuclear Nonproliferation Treaty." His declaration immediately won warm applause from among the foreign diplomats, and Algerian and Chinese scientists and technicians present.

The reactor, named "(As Salam)," is an important means to raise Algeria's science research level, as well as an indispensable installation for training Algeria's nuclear scientists and technicians. During the course of construction, scientists and technicians of the two countries combated sand-storms and droughts, and completed the reactor and supportive structures on schedule. Moreover, they planted trees, landscaped the surroundings, and laid a foundation for further development of the science town in the vast wilderness. During the course of cooperation, they established a profound friendship and took pride in cultivating, with toil and sweat, a flower of nuclear science and technology in Algeria's scientific and technological field.

The host showed the reactor and its control system to foreign diplomats and reporters. In the control center where various lights were flashing, the visitors listened attentively to a briefing by an Algerian staff member with a PHd degree. While shaking this reporter's hand, the Congolese ambassador to Algeria said: "I wholeheartedly wish China and Algeria success in this cooperative project."

After the visit, Li Dingfan, head of the Chinese delegation and deputy director of the State Atomic Energy Agency [guo jia yuan zi neng ji gou 0948 1367 0626 1311 5174 2623 2845], who made a special trip to Algeria to attend the ceremony, wrote in the visitors book: "May the flower of nuclear science and technology jointly cultivated by China and Algeria bear rich fruit soon." After learning of the meaning of Li Dingfan's inscription, (Madani), spokesman and director of the information department of the Algerian Foreign Ministry, said: The inscription fully reflects the aspirations of the Algerian people and Chinese people, and the project which symbolizes Algerian-Chinese friendship will surely further promote friendly cooperation between the two countries.

Analysts Say Russian Submarines Sold to DPRK Can Carry Missiles

SK1801023394 Seoul YONHAP in English 0217 GMT 18 Jan 94

[Text] Moscow, Jan. 18 (YONHAP)—The Golf II class submarines that the Russian fleet is selling to North Korea can carry ballistic missiles, Western defense analysts in Moscow said Tuesday.

A senior officer of the Russian Pacific Fleet was quoted as saying that Russia signed a contract with Pyongyang to sell 10 Golf II submarines in a report in a Japanese newspaper Sunday.

The Golf II class was outfitted by the Russian Navy with ballistic missiles and North Korea could load its recently modified Nodong-1 Scud missiles on the submarines if they were delivered intact, the analysts said.

Golf II submarines were manufactured until the late 1980s and are an improvement on the Fox-Trot class vessels already sold to North Korea and excel the submarines currently owned by the communist country, they said.

Russian Navy officers say the submarines were sold on condition that they are used for scrap, but North Korea may try to recycle them for military purposes.

The Russian Defense Ministry kept silence on the submarine kind and sales condition on Monday, but denied a report by the TOKYO SHIMBUN.

The Foreign Ministry acknowledged the contract to South Korean diplomats in Moscow, but assured them that the submarines were sold as scrap like ordinary exports.

It has not been revealed whether Russia was selling just the hulls or included the engines, and it is a serious matter if the latter were included, the defense analysts said.

Navy public relations officers affirmed that the submarines to be sold to North Korea would be dismantled under the observation of Russian military experts so that they cannot be used for anything but scrap.

But as its submarines are outdated and obtaining spare parts is very difficult, North Korea may cannibalize the Russian submarines to use the parts in their own submarines, the analysts said.

Because the Golf II and Fox-Trot classes are more modern than its submarines, North Korea's submarine technology will improve even if the Russian vessels arrive dismantled, they said.

Japan is said to be seriously worried because the Golf II submarines can carry ballistic missiles. In addition to the 10 Golf II submarines, Russia has sold and delivered four Fox-Trot types to North Korea, according to the TOKYO SHIMBUN.

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